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ABSTRACT

Computer-based circulation systems, it is widely believed, can be utilized to provide data for library use studies. The study described in this report involves using such a data base to analyze aspects of library use and non-use and types of users. Another major objective of this research was the testing of machine-readable circulation data serving as the resource for a variety of computer-based studies. These studies were designed to supply information for decision-making in libraries in such areas as collection development and book budget allocations. This document reports upon a study of the value of computer-based circulation data in administrative decision making in a large academic library. Computer programs were written to produce a variety of outputs including listings for survey purposes of non-users/users; books most frequently used; use of the library by department or major of the user; and, the use of books by their classification code by academic level of user. It is the conclusion of this study that such experimental by-products of a computer-based circulation system offer useful data for book selection, budgetary allocation and the surveying of the library's clientele. A major question is raised as to what is library use/non-use. From the survey in this study it may be incorrect to categorize users or non-users as individuals who do or do not take out books for home use. (Author/SJ)

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Final Report

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A STUDY WITH COMPUTER-BASED CIRCULATION DATA OF THE NON-USE AND USE OF A LARGE ACADEMIC LIBRARY

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Author's Abstract

This is a study of the value of computer-based circulation data in administrative decision making in a large academic library. Computer programs were written to produce a variety of outputs including listings for survey purposes of non-users/users; books most frequently used; use of the library by department or major of the user; and, the use of books by their classification code by academic level of user. It is the conclusion of this study that such experimental by-products of a computer-based circulation system offer useful data for book selection, budgetary allocation and the surveying of the library's clientele. A major question is raised as to what is library use/non-use. From the survey in this study it may be incorrect to categorize users or non-users as individuals who do or do not take out books for home use.

It is recommended that additional studies with computer-based circulation data be done.

Error:

Page 7, lines 3 and 4 from top, "March 1, 1971 through February 29, 1972" should read --April 1, 1971 through March 31, 1972--.

Page 21, line 3 from bottom, "March, 1971 - February, 1972" should read --April, 1971 - March, 1972--.

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1. Preface

Appreciation for their assistance is expressed to: Student Interviewers: Eldon and Barbara VanDerWege, John Vittal, Priscilla Harvill, Wira Babiak, Kathy Allman, Susan Straight, Michael Golden, Bob Hermiston, and Robin Ronne; and to the User Group which reviewed the computer produced listings: Ellsworth Mason, Director of Libraries, Robert Erisman, Circulation Librarian, William A. Harper, Automation and Systems Librarian, Barry Kirschner, Art and Architecture Librarian, Leo W. Cabell, Associate Director of Libraries, William Webb, University Bibliographer and Eugene Petriwsky, Assistant Director for Technical Services.

As well, acknowledgement is made of the encouragement and review of the grant proposal made by Dr. Lewis Crum and Henry Fontaine of the Denver Regional Office of the U.S. Office of Education.

2. Introduction

Through the logic of systems analysis and the view of the circulation system and its data as part of the total library system it should be clear that many important studies of library use and non-use and library effectiveness could be made.

Computer-based circulation systems, it is widely believed, can be utilized to provide data-base for such studies. The study described in this report involves using such a data base to analyze aspects of library use and non-use and types of users. Another major objective of this research was the testing of machine-readable circulation data serving as the resource for a variety of computer-based studies. These studies were designed to supply information for decision-making in libraries in such areas as collection development and book budget allocations.

3. Review of the Literature

A literature search revealed that the design of computer-based systems has not gone beyond an emulation of the manual system. Invariably a sentence or two about user and other studies now made possible (Gull, Hayes, Surace) is provided in discussions of mechanized circulation, but few have made any application of these concepts.

Historically, Becker has pointed out that mechanized circulation control began in the 1930's when edge-notched cards were used. When punched cards were introduced (Parker) in place of the edge-notched variety, circulation systems were able to use card sorters to help maintain the circulation files.

The concept of a machine readable book card and borrower's card was introduced in the 1940's by IBM when it designed such an installation for the Montclair Public Library (Quigley). This system required that a punched book and borrower's card be inserted in a "record control unit" which would, via another keypunch, reproduce the inserted information. Quigley noted in 1941 the numerous by-products with such equipment:

> It is perfectly possible, for instance,...to learn by sorting the cards what books the doctors among the Library borrowers had read...how many detective stories were borrowed during a certain time, what non-fiction had been borrowed by boys of a stated age.... The possibilities of obtaining information on "who reads what" are so unlimited that Montclair librarians will probably need to guard against seeking curious bits of information or riding professional hobbies.

In 1959 IBM produced the 357 Data Collection System for circulation control. The output of this system was fed into the computer and a magnetic tape produced for computer processing. Since the early 1960's a number of other systems have been introduced, including Standard Register's Source Record Punch, Colorado Instrument's C-Dek System, and other commercial data collecting devices.

Most of the literature on circulation systems describes the installation phases of mechanized circulation systems. Economic justifications, systems analysis, and other aspects of how and why the change-over from manual to machine techniques was made are discussed. Little attention is paid to the use of this information as an aid for administrative or service decision-making.

The important study by Cammack (1967) describes data that can be collected and analyzed to assist library management. The data include charging activity patterns to assist in manpower scheduling, heaviest used portion of the collection, student and faculty usage, students and fields of study correlations, grades and library usage, etc. This study is a fine example of what can be done with circulation data.

Another report that was published in 1971 is of a particular value. This is the research done at the University of British Columbia by Simmons and deals with the analysis of machine-readable loan records and their application to book selection. Essentially the major accomplishment of the British Columbia study was the listing by computer of those titles in the library in need of additional copies because of their being in high demand as revealed through circulation.

DeGennaro, in his article on Harvard University's Widener Library shelf list conversion program, states that records of circulation data at Harvard have been kept since 1965 and these "constitute an invaluable and unique data base from which statistical analyses of the use of the collection have been made." The study referred to (Palmer) is an analysis by Harvard book classification number of the use of books during 1965-69. DeGennaro goes on to say that "such potentially useful management information has never before been available to library administrators."

J. McNee Elrod of the University of British Columbia says that:

> Perhaps the most important result of computerized circulation has been the ease with which months of loan records can now be analyzed...with the demand for each book measured... the library could do a much more efficient job of meeting readers' needs. The figures will indicate when a reserve book should be taken off short-term loan and when a stack book should be put on reserve or duplicated.

Writing in 1967, C. D. Gull, Professor of Library Science at Indiana University stated:

> There is a very real need for information about the present capabilities and future potentialities of computerized circulation control systems...there is almost no information on the effective use of library materials and the need for them, on the potential application of computers for circulation statistics, on the introduction of rational management to supplant intuitive management or on the use of circulation information to improve collections and service.

Since the time of Gull's call for research in this area, more sophisticated systems have been developed (at least three on-line circulation systems have become operational) and more attention has been paid to cost/benefit analysis. But as of the date of this study, Gull's call for research has barely begun to be answered. This is unusual, because circulation data have been analyzed frequently in the past in manual systems (Davidson, Jain, Steig). These analyses were usually accomplished through the laborious method of tabulating the information on each book's circulation card and/or date-due slip. That these manual techniques have not been adapted to mechanization may be explained by the systems designers' disenchantment with such basic research or that they are bogged down more with just making the hardware and software work than with innovating and improving library services.

A state-of-the-art report by Cecily Surace of the Rand Corporation, published in March, 1970, commented:

> Since the principal purpose of the library is to disseminate information found in documents and one of the instruments for doing this is the circulation system, it is obvious the circulation system should not be treated as a purely mechanical operation which does not require statistical analysis and feed-back.... It can...assist management in analyzing the various circulation operations, reveal weakness in the collection, and provide data on user reading habits, etc.

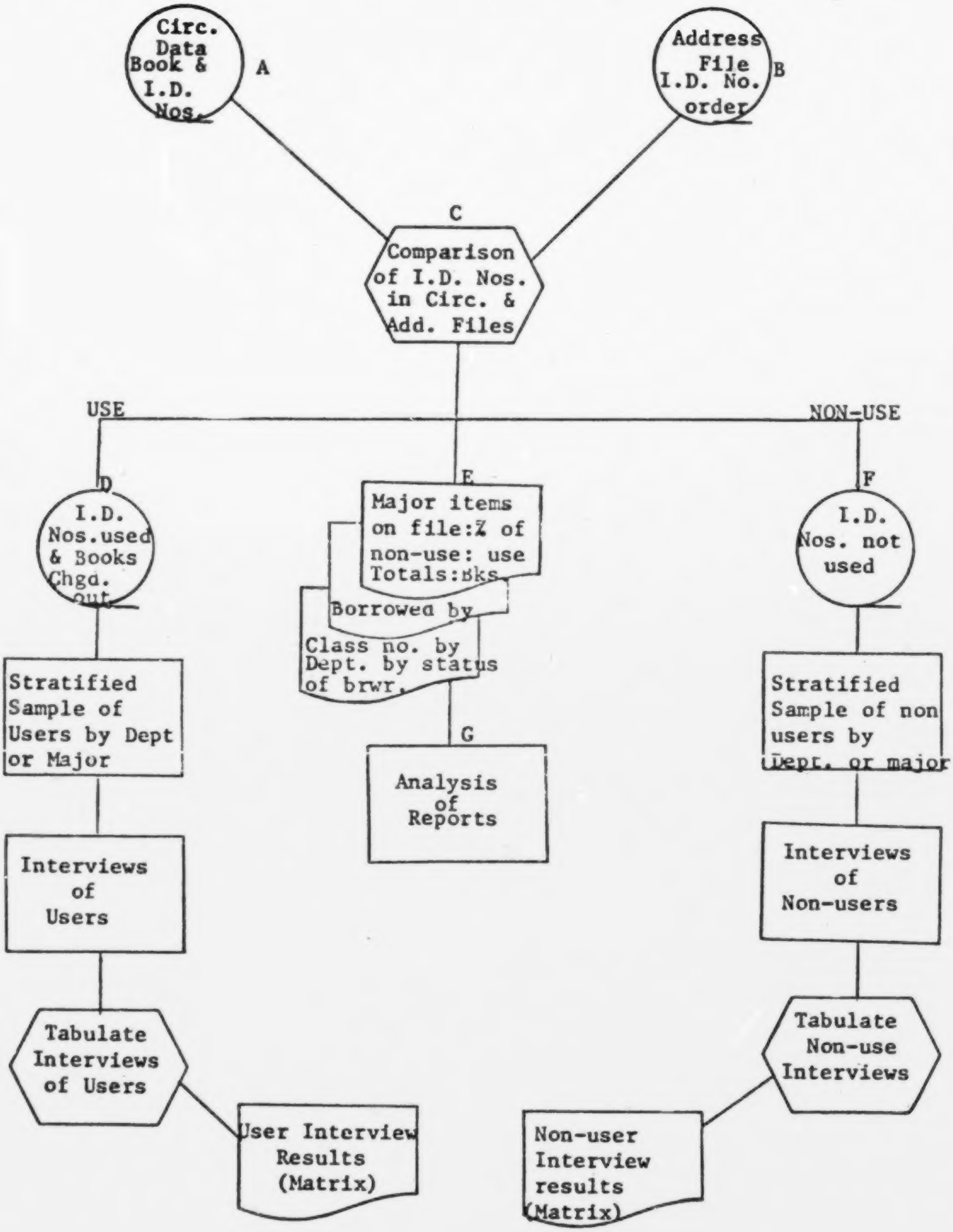
4. The Study

A stylized view of one aspect of this study shows the comparison (C) of the archival circulation transaction file (A) 253,439 circulation transactions accumulated during March 1, 1971 through February 29, 1972 and the borrower address files (B) to produce two areas: use (D) and non-use (F). (The narrative of this section is coded by letters to the flow chart "Overview of Circulation Data Study"). This is made possible by the machine's listing of identification numbers that have been used to charge out books and preparing a separate list of those ID numbers that have not been used to charge out materials. In addition, printouts (E) were made of the major items on these files, e.g., the total number and percentages of books borrowed per their classification numbers and by departments by classification numbers and the total number and percentages of books borrowed according to the academic status level of the user (freshman to graduate).

The eighteen month study (beginning December, 1971) involved the writing of several original programs by William Harper, Automation and Systems Librarian, the analysis of the out-put of these programs, the interviewing of non-users and users and the analysis of the completed interviews.

The data collected for the study involved only the Library of Congress and Dewey Decimal classed books in Norlin Library of the University of Colorado. This Library is the central collection of about 800,000 volumes (monographs and serials) for the humanities

OVERVIEW OF CIRCULATION DATA STUDY


Circ. Data Book & I.D. Nos.
A
Address File I.D. No. order
B
C
Comparison of I.D. Nos. in Circ. & Add. Files
USE
NON-USE
D
I.D. Nos.used & Books Chgd. out
E
Major items on file:% of non-use: use
Totals:Bks
Borrowed by
Class no. by Dept. by status of brwr.
F
I.D. Nos. not used
Stratified Sample of Users by Dept or Major
G
Analysis of Reports
Stratified Sample of non users by Dept. or major
Interviews of Users
Interviews of Non-users
Tabulate Interviews of Users
Tabulate Non-use Interviews
User Interview Results (Matrix)
Non-user Interview results (Matrix)

and the social sciences. Books in Norlin Library can be borrowed for one month by students and one semester by faculty and staff. Periodicals do not circulate and as a result are not part of this study. Within Norlin are four special divisional collections: College (Undergraduate), Music, Education, and Government Documents. Books charged out for the Music, College, and Education Libraries are within this study while Government Documents are not. Outside of Norlin Library (and excluded from this study) are the collections found in the branch libraries: Earth Science, Math/Physics, Science, Business, Law, Art and Architecture, and Engineering. These serve the students and faculty associated with these disciplines.

No attempt was made to measure in-house circulation although local estimates place this at a ratio of anywhere from 5:1 to 2:1 (in-house use to home use).

Borrowers were categorized for this study as those on the Boulder campus of the University of Colorado and in the following groups: freshmen, sophomores, juniors, seniors, graduate students, faculty and staff.

5. The Computer-Based Circulation System

The Automated Circulation System (ACS) at the University of Colorado's Norlin Library is a batch-processing system which collects data on each transaction and transmits it electrically to a central controller which records the information on magnetic tape. Each weekday evening the tape of that day's transactions is run against the circulation programs at the University's data processing center to produce the appropriate reports and notices and an updated circulation file on microformat tape. That tape is mounted on a computer-output microfilm (COM) device to produce a 16mm microfilm copy of the updated circulation file ready to use the next morning when the library opens.

Data for each transaction is gathered by the ACS through a data collector, the "C-DEK." The C-DEK is a console that contains a book card reader, an ID card reader and a keyboard.

In the book card is punched a call number, up to 35 characters, and a title, up to 28 characters. The user's ID card contains a ten-digit number, usually a social security number preceded by a zero. The keyboard contains 14 columns of 10 buttons each which allow the entry of a variety of data. The first column sets the type of transaction, such as charge out, discharge, recall. In the remaining columns is entered other data as needed: loan period, file number, ID number (for nual charge out), etc.

The controller contains a clock which attaches a date and time to each transaction. Identifying information for each piece of equipment involved in the transaction is also input by the controller.

The processing of the run each weekday at the data processing center updates the file and produces the necessary paperwork, including listing of overdues returned, items recalled, and statistical reports. Overdue and recall notices in postcard form are generated automatically in connection with a machine-readable address file so that the forms are ready to run through the postage meter and drop in the mail.

Although now used in the batch-processing mode, the ACS is designed so that it could easily go on-line either to the large computer at Administrative Data Processing or with the library's own mini-computer, with the magnetic tape utilized as a back-up system.

6. Methodology of the Study

The data base used to generate the reports in this study was originally an accumulation of 600,000 records of transactions of all kinds, recorded by the automated circulation system over a one-year period. Out of this master file were selected only charge-out transactions, which were then sorted by user identification number. In turn, this list was used to select only those charge-outs of library material classified in the Library of Congress or Dewey systems. Thus, for example, data on charge-outs of government documents is not included in the present study. The abridged file of LC and Dewey charge-out transactions contained 253,439 records.

The seven reports each required three or four programs. In most cases the organization and data from one report as it was generated were used in generating another report. This method, coupled with the reduction of file size mentioned above, resulted in lower costs than anticipated for the generation of the reports.

Below is information pertaining to the methodology used in generating individual reports.

USERS AND NON-USERS REPORTS (IA, IB)

All valid records of items circulated (charged out) by Colorado's automated circulation system from April 1, 1971 through March 31, 1972 were used in determining library users and non-users. The edited file was sorted by identification number of the user, and within that by call number of the library material used. Other information contained in this file were borrower code, date of transaction, time of transaction and type of transaction.

To obtain the Users file, the sorted file was compared with registration files to obtain a wide cross-section of students who were enrolled at Colorado in November of 1972. The selection was obtained by taking an identification number and determining if the student were currently enrolled on a index sequentially-organized file called the Address File. If no match was found, the next identification number was examined. When a match was found, a great deal of coded information was obtained from the Address File in addition to local address and telephone number. All this information plus the list of materials used was assigned to be printed out. After this identification number was found, the next fifty records were skipped and the search for a new identification number begun. One further aspect of the selection was that fifty-six major fields (Architecture, Biology, Fine Arts, Business, etc.) were eliminated from consideration because those students' use of the main library would not provide sufficient knowledge of Norlin operations. (The Boulder campus is also served by seven branches: Law, Earth Science, Engineering, Business, Math/Physics, General Science, and Art & Architecture.) This criterion was applied in creating both Users and Non-Users Files. Appendix IB is a portion of the Users File.

To obtain the Non-Users File, all identification numbers which were not User numbers and which were not excluded by specific major codes were listed. The file size of Non-Users was 5,201 people who, for reasons given in the interviews, had not borrowed one item from Norlin Library during the period of one calendar year even though the materials for their declared majors were housed at Norlin. An example from this report is shown in Appendix IA.

GROSS VALUES BY SUBJECT REPORTS (IIA,IIB)

The reports give a breakdown of subject area use by frequency and percentage of total use by group. The first report (IIA, Gross Use Values...) includes all use of any material within the subject area defined. The second report (IIB, Use Values Excluding...) gives the same information minus multiple use of the same material by the same person within the year. The reports do not examine areas outside of the Library of Congress and Dewey Decimal Classification systems (i.e. Government Documents and other special classifications) nor conversion transactions necessitated by the absence of a properly punched book card at the time of the transaction. The number of check-outs is thus reduced to 253,439 items.

To obtain these reports it was necessary to undertake a second large sort of all items charged out into ascending call number and identification number order. Classification areas were built to reflect the major subject areas of the classification codes. Totals in each classification code include values for all classification elements following the preceeding classification code. For example, DB is not represented in the reports as a unique classification code but its values are included in the numbers and percentages for the DC code.

Each line of the reports gives both raw values of items checked out of the Library and the percentage each group reflects the total. For example, an item used only once would add a value of one under the column ONE in the proper classification code (CC). An item used three times by two different people would add a value of 3 under the column THREE in the proper classification code. In the Use Values Excluding...Report (IIB) a distinct shift toward lower usage per volume is seen because multiple use by the same person is not included in the values.

Infrequently the percentage values do not add up to a value of one hundred. The cause is rounding considerations and does not reflect some unknown value. In the Library of Congress Classification Code an asterisk represents a space and was used for machine manipulations. In the Dewey area each two-digit code should have been followed by a zero to reflect the full Dewey area of classification.

SUBJECT ARRAY BY CLASS REPORT (III)

The significant detail for the generation of this report on utilization of materials by various user groups by subject areas is that the class status of the borrower used in creating the report was the same as was in effect at the time of the transaction. To obtain the proper codes, a list of all valid checkouts in the Library of Congress and Dewey Classification codes was compared against a Registration Term Master for the Spring of 1972. This shifted the data toward the upper division classes slightly because of the Spring 1971 semester. Other factors are the numbers of graduating seniors and dropouts which were not still registered in the Spring of 1972.

Classification codes reflect the same considerations found in IIA and IIB as to their groupings. Percentage and rounding considerations also apply.

MATERIALS USED SEVEN REPORTS (IV,V)

Aside from the criteria of valid charges and the exclusion of conversion transactions these reports are products of already created files organized by call number. Organized by call number, an earlier tape was generated from the Gross Use Value Report with the call number of any item used seven or more times. This file, when run against the full charge out file from which it was extracted, matches call numbers and lists out each entry completely. Included data elements are identification code and number, year and day, hour and hundredth of hour, and transaction code.

Report IV includes the multiple use of the same material by the same person; report V excludes multiple use.

SUBJECT AREAS REPORT (VI)

All majors were divided up into forty-nine divisions of funding which related to the allocation of funding by the Library. For example, the division of Biology included the following majors: 106 Biology Arts and Sciences, 103 Botany Arts and Sciences, 406 Basic Science Graduate Biology Graduates, 408 Botany Graduates, and 463 Zoology Graduates.

A file generated earlier contained the major of every user of the lbirary during the period under study. By creating a table of funding areas and the classification division all charge activity was distributed into the proper areas. A sort of the resulting file reorganized all data into ascending funding area codes and, within each, ascending classification codes by use. A print program produced the final report.

7. Results and Findings

The computer produced findings (sample pages of the print-outs) in this study of circulation data are attached to this report as appendixes IIA and B, III, IV, V, and VI.

Appendixes IIA and B illustrate the frequency with which certain books were charged-out for home use. These tabulations show totals of use for both the major congressional and decimal classification divisions. This type of finding is of value in indicating activity in the book stacks for better prediction of work-flow in the shelving operation. Librarian/bibliographers also may see the take-out activity for their areas of collection development as contrasted to other subject areas.

The information in both these appendixes would be additionally valuable if a machine-readable shelf list were available. On such a basis, use and non-use within a given area could be calculated and provide significant information for decision making, particularly along the lines of selecting material for storage. For example, if there are a total of 3500 books in the DE category (classical antiquity) and only 35 (or 1%) have been used there is need to evaluate a policy of adding more material to the library collection on this topic and the materials already in the collection could be likely candidates for storage.

Appendix IIB is similar to IIA except that it lists circulation activity excluding re-borrowing (renewals) of books by the same borrower. The following tabulation details the volume/frequency with which the total book collection circulates:

Total Circulation	1	2	3	4-6	7-9	10+
226,859	108,824/48%	46,940/21%	31,446/19%	34,851/15%	4206/2%	592/0%

As can be seen 48% of the books charged-out are taken out once during the year. The remaining 52% circulate at a higher frequency from twice to ten times a year. This finding is relevant in showing the use made of the collection. The circulating part of the library collection numbers about 650,000 volumes (excluding serials). Therefore, it may be safe to say that approximately 34% of the circulating collection is being charged-out for home use. This is not to say that it is the same books each year. In fact, the experience in this circulation system has been that there is substantial turn-over throughout the entire collection.

Appendix III displays in a matrix the use of the library's collection according to the book classification scheme and the status of user (from freshman to graduate student). The findings here show circulation activity to be incremental according to the level of user. Freshmen make up for 10% of all circulation, 13% by sophomores, 16% for juniors, 22% by seniors and 37% by graduate students.

Specific heavily used materials are pinpointed in Appendixes IV and V. These print-outs show all the books used seven or more times during the period of the study. (Appendix IV includes all circulations including renewals while the Appendix V list excludes renewals).

In each appendix are listed the call number of the book each time it was used, the borrower's identification number, the time-span of circulation and the frequency of the circulation for that item (0001,0002, etc.).

In Appendix V the total number of items used seven or more times by different borrowers during the year is 615. The total number of uses for this activity is 5067.

This listing of 615 items has been used as a purchasing list. A total of about 2000 volumes have been purchased as a result of analyzing the list. It is assumed from a careful study for purchase of the types of pertinent materials on the list that these additional copies will be of value to library users. Chiefly, this value lies in our having an extra copy on the shelf for the users of the most heavily used materials. It is expected that the user would stand a better chance of finding the book he wants.

Appendix IV indicates 1677 items used (including renewals) more that seven times and the number of uses is 13,254. This tabulation may be of less value than that without renewals because it is inflated somewhat by multiple use by the same person.

The purchasing of the volumes in Appendix V could have been considerably facilitated if a machine-readable shelf-list had been available. With a machineable shelf-list most of the information required for a purchase request could have been generated giving author, title, publisher, number of copies, etc. The manual technique involved going to the shelf list and copying out the necessary information onto the purchase request by hand.

Appendix VI measures the frequency of uses of books by class numbers by the students associated with a particular department. In the student's master computer-based record is a three-digit code that describes the student's major subject area of study. (Appendix VIA illustrates some of these through selected pages). A problem encountered within the study is that 5000 students out of 20,000 have undetermined majors. One-quarter of the student body then is not represented in this tabulation.

The value of Appendix VI lies in that it enables the Library to rank various departments by the library-use it generates as represented by home circulation. This should have some bearing on the budgetary consideration for book purchasing.

In general, students make use of those books most closely associated with their area of study, (e.g. LB in Education) but simultaneously make use of books in a multitude of areas, e.g. in Education about 160 different subjects have been used.

Of particular interest and benefit to this type of study would be having the figures for the total enrollments in a discipline so that contrasts based on per-capita use could be made. This would also give the amount of non-use and use for each department. The figures in Appendix VI and those in other studies should signal a need for library use instruction or emphasis for promoting library use to students and faculty within a certain discipline. Over a period of years substantial increases or decreases in book-borrowing activity within a department could indicate a need for library reaction and action. In the course of the study depicted by Appendix VI it was discovered that one department considered on a low priority level in the University budget was among the highest levels of book use by students. This has forced the library to re-evaluate its budgetary stance toward this department. Along the lines of collection development this data has significance for the library's bibliographers in that it provides a measure of use for each library-funded subject area of acquisition.

A major part of the research was the structured interview of library users/non-users as selected by the computer through a random sample. A sample of 200 users and 200 non-users was produced by the computer. One hundred interviews were to be made of each group by a dozen student interviewers for a total of 200 interviews. The interviewers reached 69 users and 73 non-users for a total of 142 interviews during the month of February, 1973.

The results of the interviews are interesting and lead one to two conclusions: (1) that use is not necessarily based on borrowing or not borrowing books and (2) that library use is developmental (or seasonal at least, i.e., a non-user one year may become a staunch library user the next). The tabulations show that at times it appears a homogenous group was being interviewed rather than two supposedly disparate groups (user/non-user). Since the time span of the overall study was March, 1971 - February, 1972 the respondents all had a year at least during which to modify their library behaviour. In general as the graphs reveal, the person selected for interview by the computer as a non-user based on circulation activity is indeed a library user.

Appendixes IA and IB illustrate the computer-based sample for the interviews. IA is a selection from the non-user listing while IB is from the user listing. As mentioned the difference between the two groups was whether or not a book (or books) had been charged out by a person during the time period of the study. This is shown in the Users listing where the actual books charged out by the User are listed as part of the listing.

The assumption of library use equalling home circulation may have been faulty since repeatedly the non-user responded similarly to the user. The USOE group is essentially a user group. A separate survey (with similar questions) conducted in April, 1972 on behalf of a Council of Library Resources Fellowship (Lubans) revealed 139 non-users that are markedly different from those of the present survey. These are represented for contrast as CLR-Non-Users on the graphs.

The questionnaire used is attached as Appendix I in this report. This form was used by the student interviewers in the face-to-face interviews with the various respondents.

Selected results in percentages are presented in the following graphs.

Most of the graphs reveal 3 columns on use and non-use: The two areas of investigation under the present grant (USOE-Use, USOE-Non-Use) and a third column from the previously mentioned Council on Library

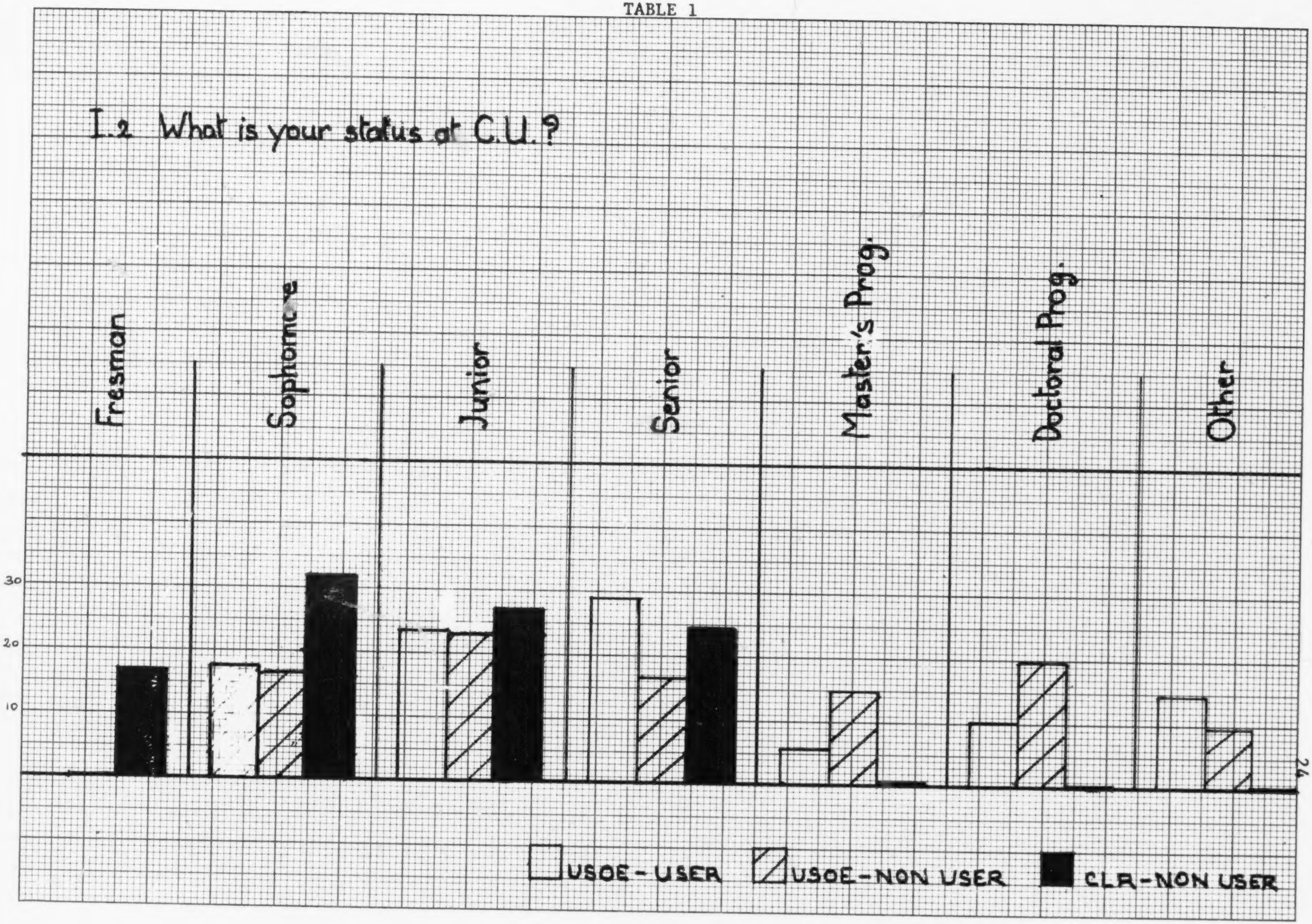
Resources Study (CLR-Non-user).

Table 1 illustrates the response to the question on the academic status of the user/non-user. There are no freshmen in the structured interviews due to the time lag within the study. Indeed, the graph indicates that this is a study mainly of upper divisional students. Contrasted to this is the CLR study which is a broader representation of the various levels.

The frequency of library use is illustrated in Table 2. As shown the USOE-users and non-users are remarkably similar in their library use patterns. It is this table and others that indicate the lack of contrast among the two groups. Compared to the CLR-Non-User the lack of difference among the USOE users/non-users is further enhanced. Assumptions based on this graph could be that non-use is not based on the lack of charging out books for home-use, or that non-use is a temporary state which fluctuates depending on the individual student's course requirement. This last assumption is backed-up by Table 3 where the major reason for non-use is given by those respondents indicating little or no use. What it comes down to is that non-use is based on whether or not courses require library use. Another significant contrast is that of the CLR-non-user where 32% (compared to 18-19%) list the library environment as contributing to their lack of use.

Tables 4 and 5 delve into the history of library use for the user/non-user previous to the university. It is safe to say practically all the respondents have made use of a library (either public

TABLE 1



I.2 What is your status at C.U.?

TABLE 2

I.7.a How often do you use the C.U. library?

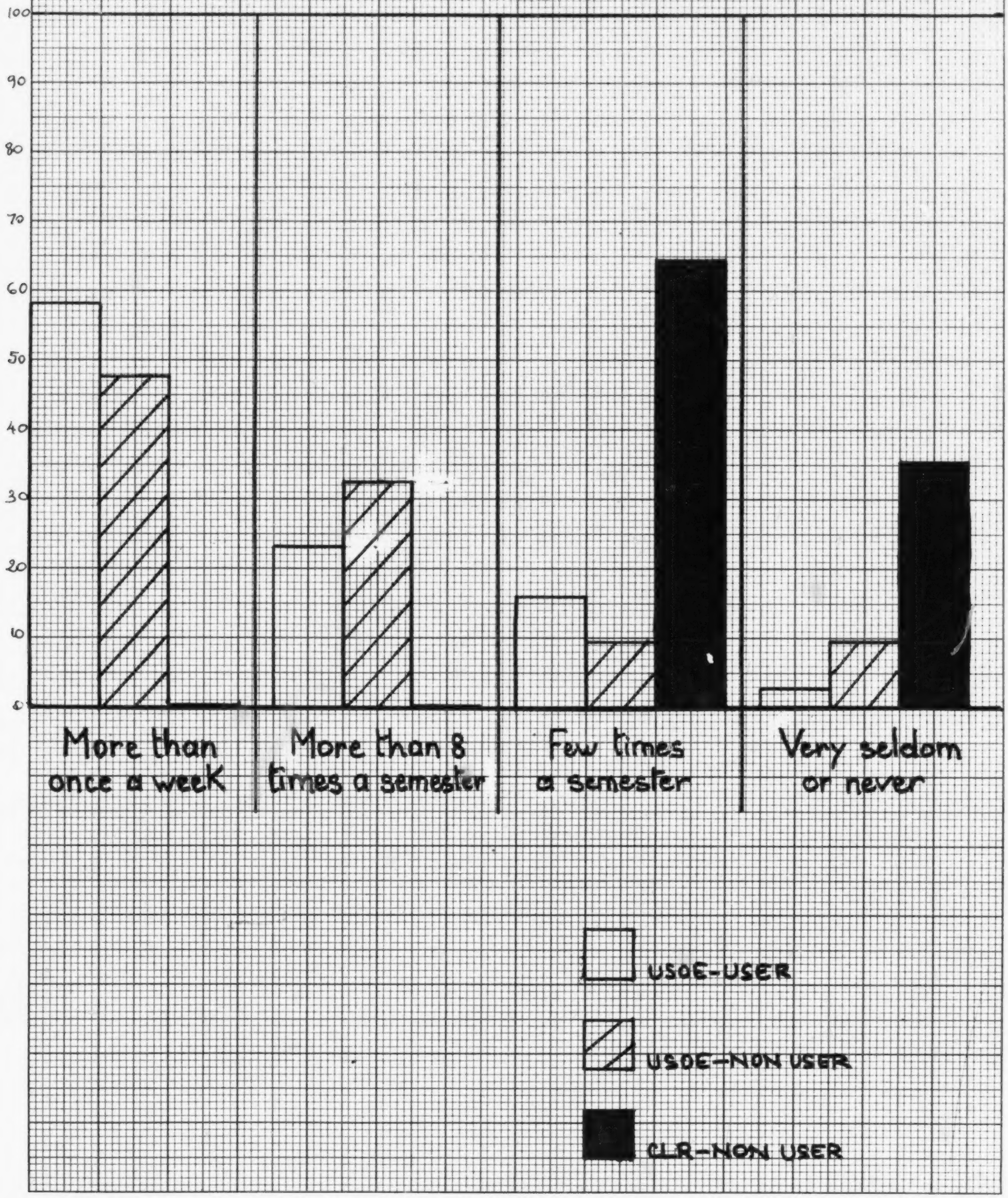


TABLE 3

I.7.b If either last two categories are checked, what in your opinion is the reason?

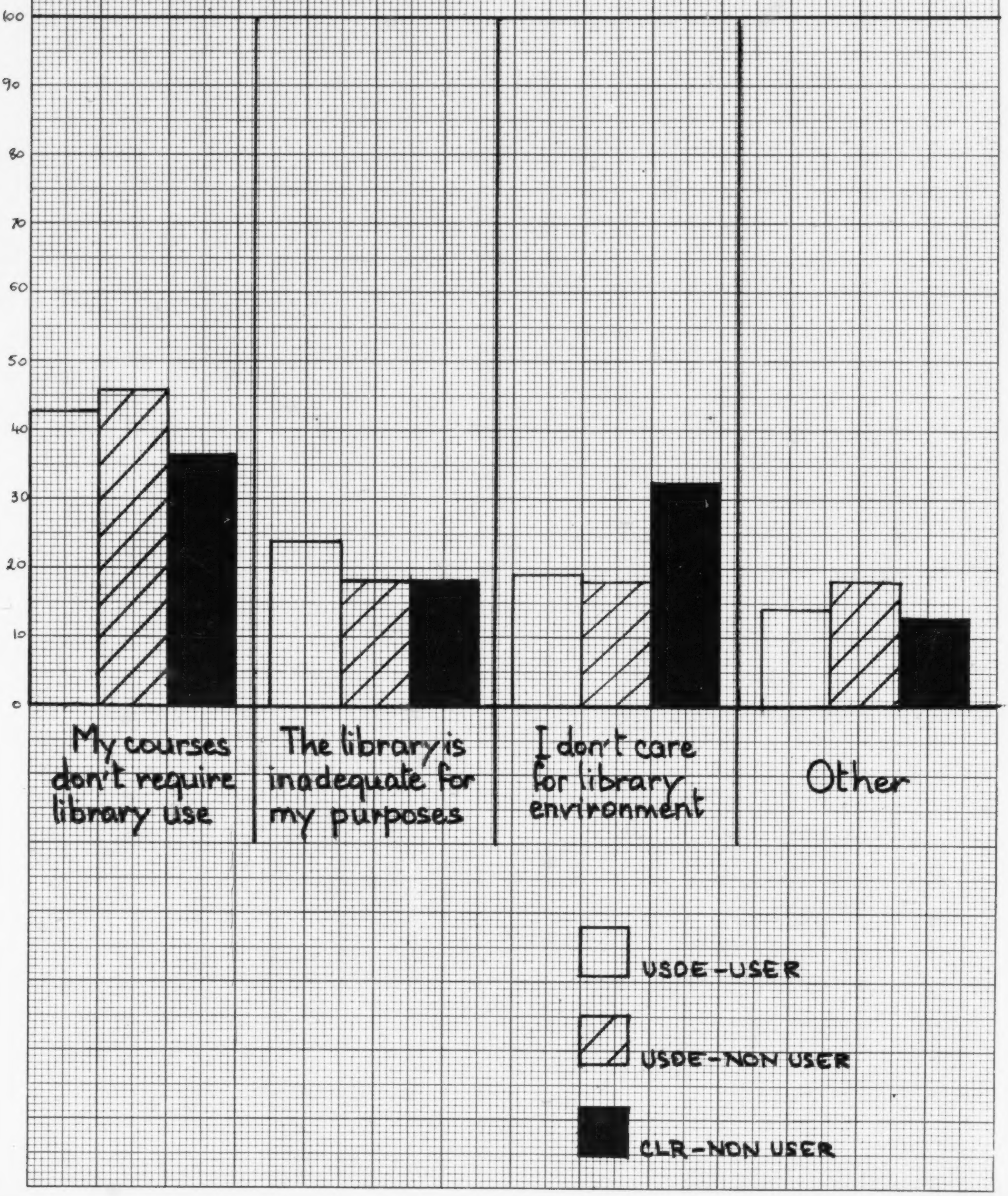


TABLE 4

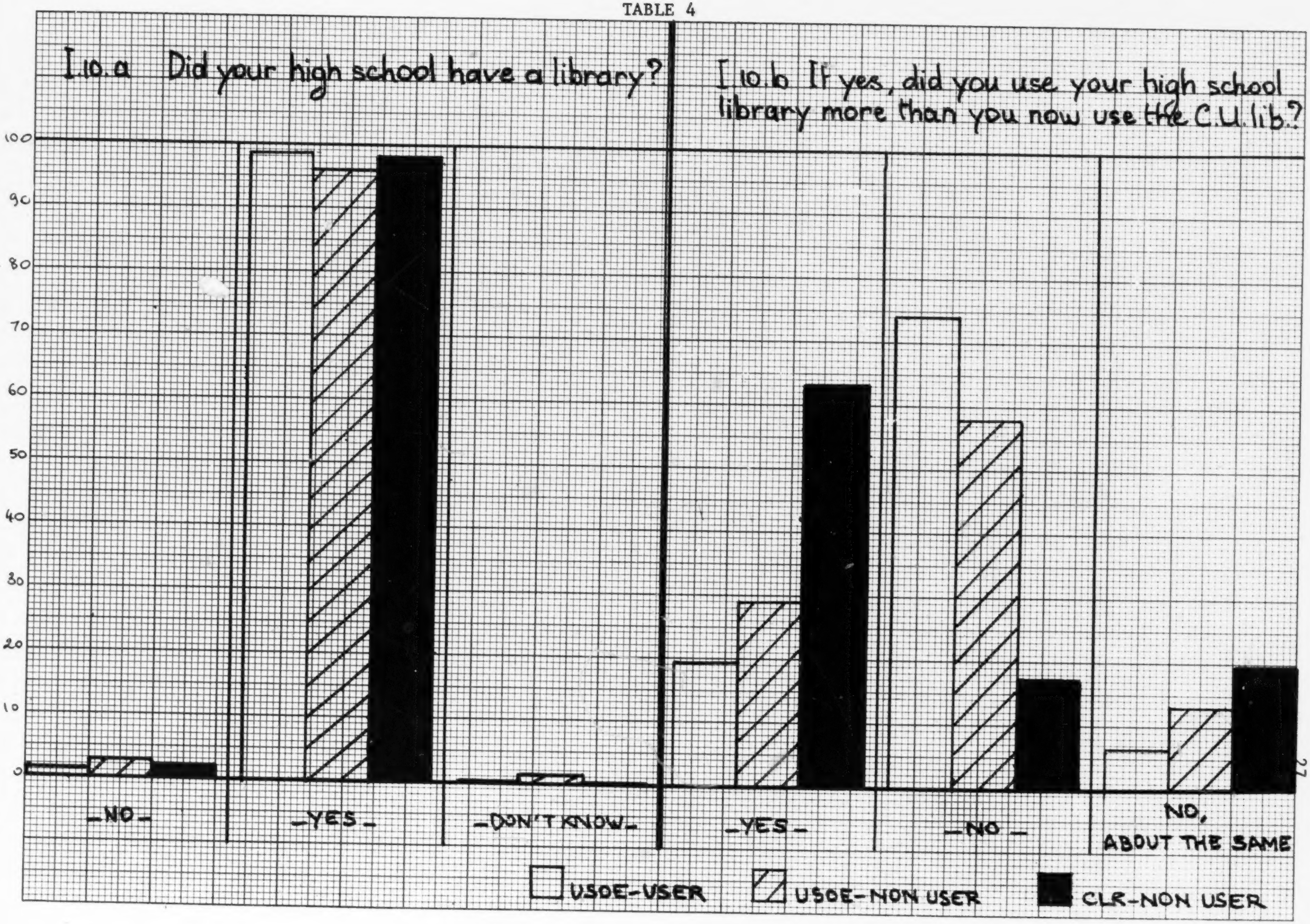
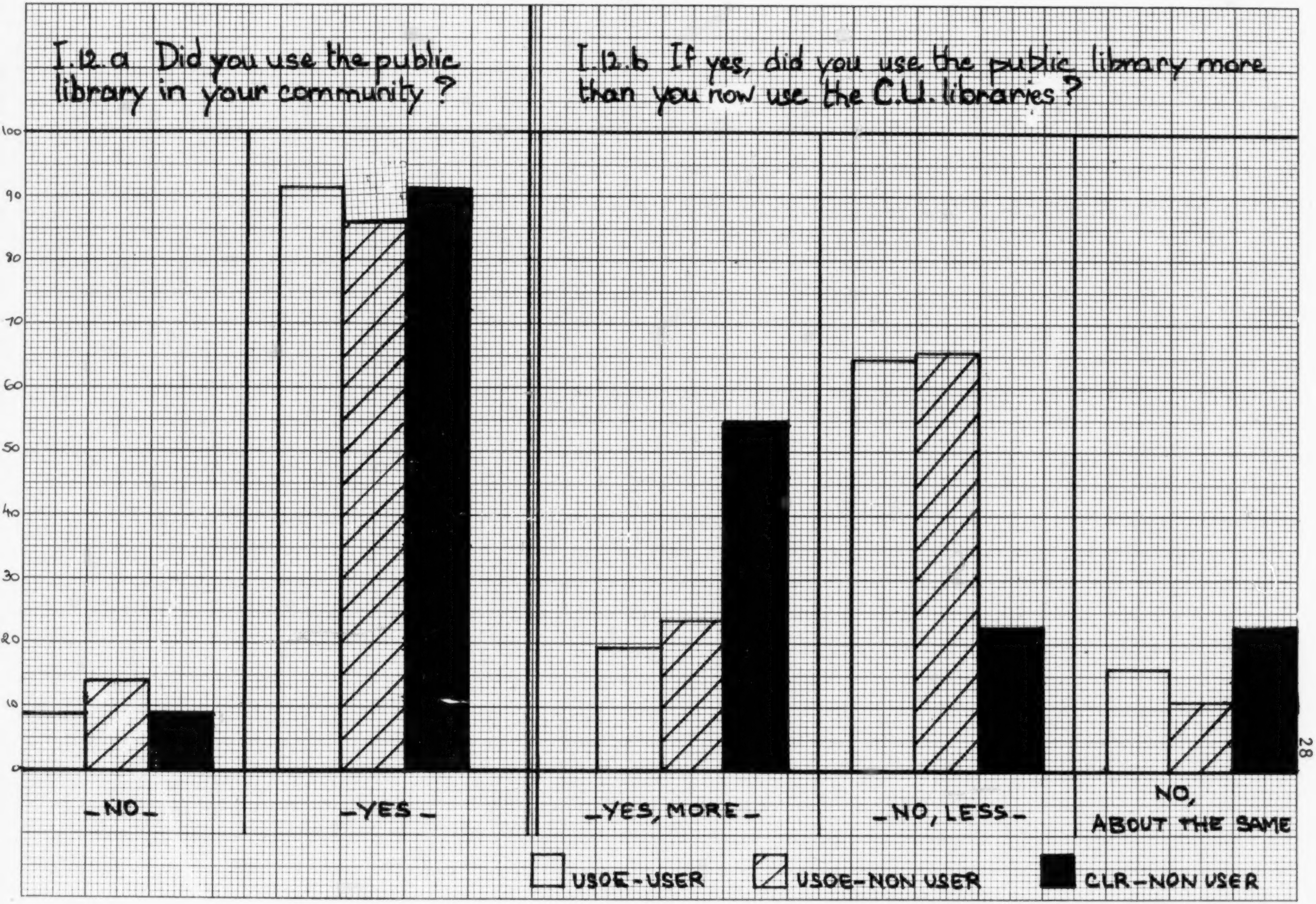

I.10.a Did your high school have a library?
I.10.b If yes, did you use your high school library more than you now use ~~the~~ C.U. lib.?
100
90
80
70
60
50
40
30
20
10
0
-NO-
-YES-
-DON'T KNOW-
-YES-
-NO-
NO, ABOUT THE SAME
☐ USOE-USER
▨ USOE-NON USER
■ CLR-NON USER

TABLE 5


I.12.a Did you use the public library in your community?
I.12.b If yes, did you use the public library more than you now use the C.U. libraries?
100
90
80
70
60
50
40
30
20
10
0
-NO-
-YES-
-YES, MORE-
-NO, LESS-
NO, ABOUT THE SAME
USOE-USER
USOE-NON USER
CLR-NON USER

or secondary school) before entering the university. Their frequency of library use has for the USOE Users/Non-Users generally been increased at the university in contrast to their use either at the high school or public library. Of the three groupings only the CLR non-user states that he has made more use of both his public and high school libraries than the university library.

The users/non-users were asked a number of questions in regard to their attitudes on and abilities in library use and the need for library use. Table 6 is remarkable in the contrast provided by the CLR-non-users being 54% negative to the statement that their professors in general do encourage students.

Similar results were achieved (Table 7) in the response to the question on library use playing a role in the grading of term papers. Only from 8 to 27% of the students feel that their expertise or lack of it in the library is taken into account.

Significantly for library use instruction programs, the users and non-users state (44% - 48%) they lack training on how to find information in Table 8.

The CLR non-user (Table 9) has the largest negative reaction to the question on whether or not he feels well able to do research in the library. 44% of this group answered "no" to this question. A surprising amount of confidence was demonstrated by the USOE groups (66-69%) which said they do feel well able to do research in the library. This response may well be the result of the structured interview. An individual in this situation may have been reluctant

TABLE 6

II.2 Do your professors, in general, encourage students to use the library?

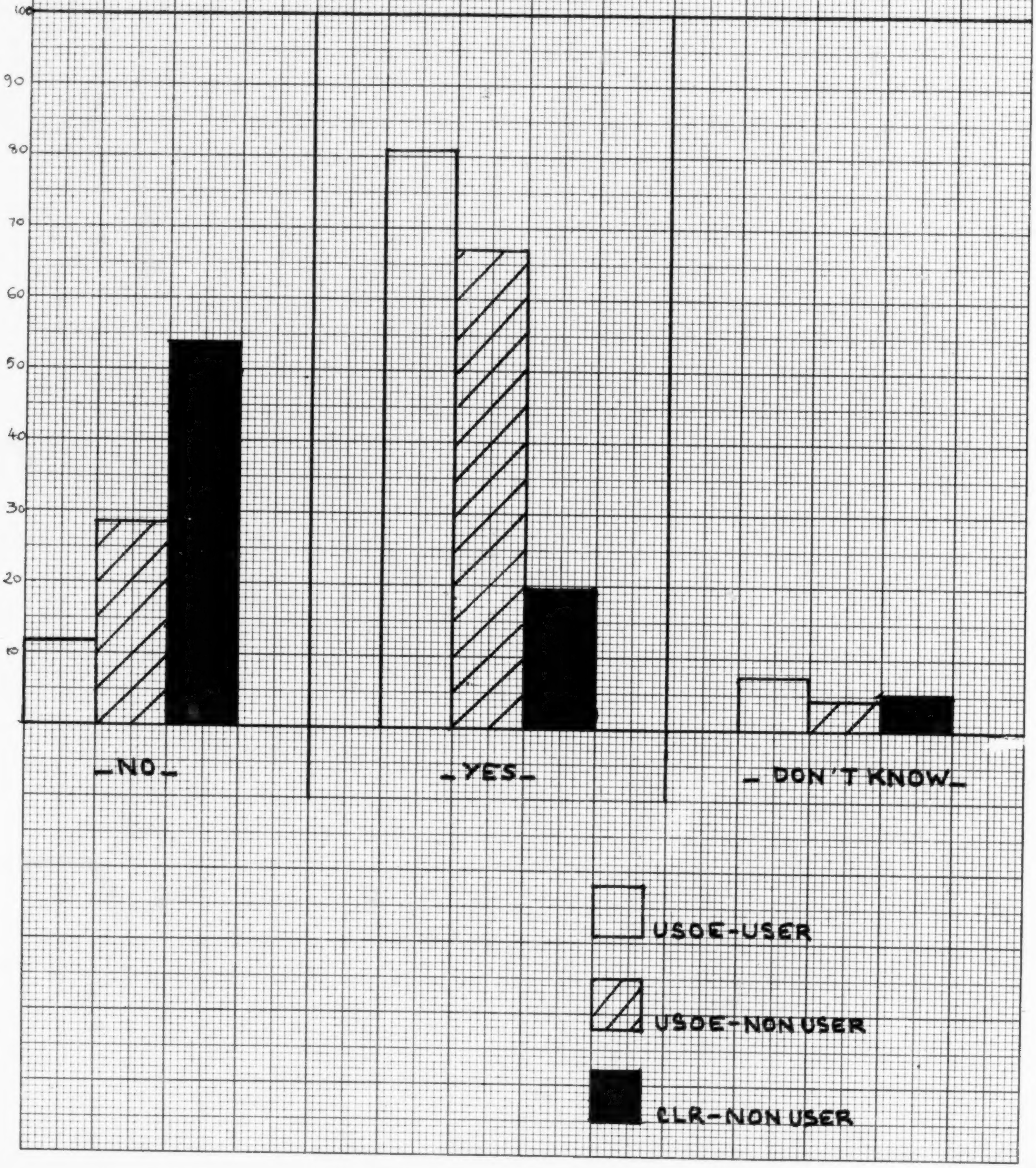


TABLE 7

II.3 Is your expertise or lack of it in library use taken into account by your professors when they grade your papers?

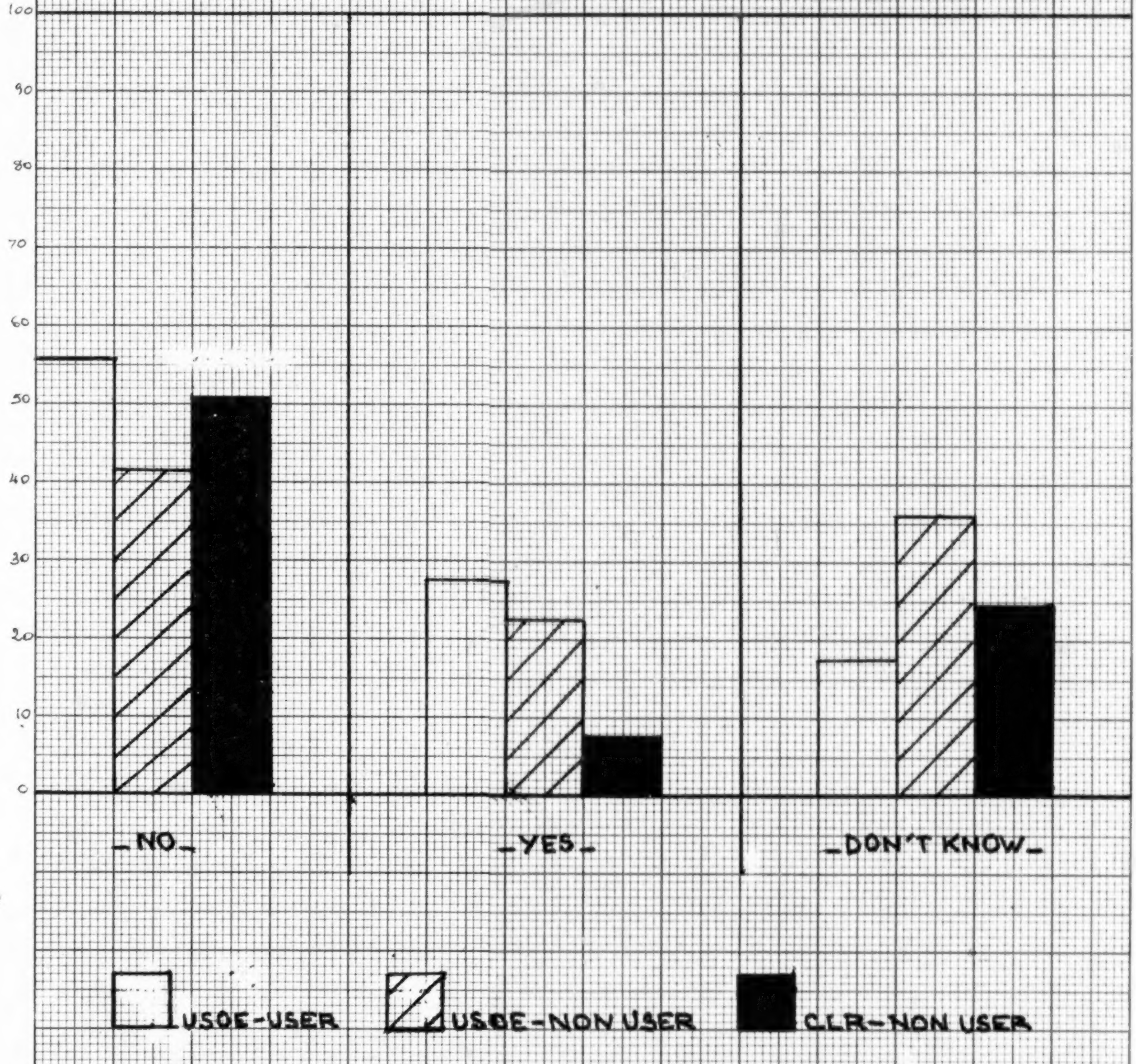


TABLE 8

II.4 Has your undergraduate training given you all the preparation you needed for finding information in the library?

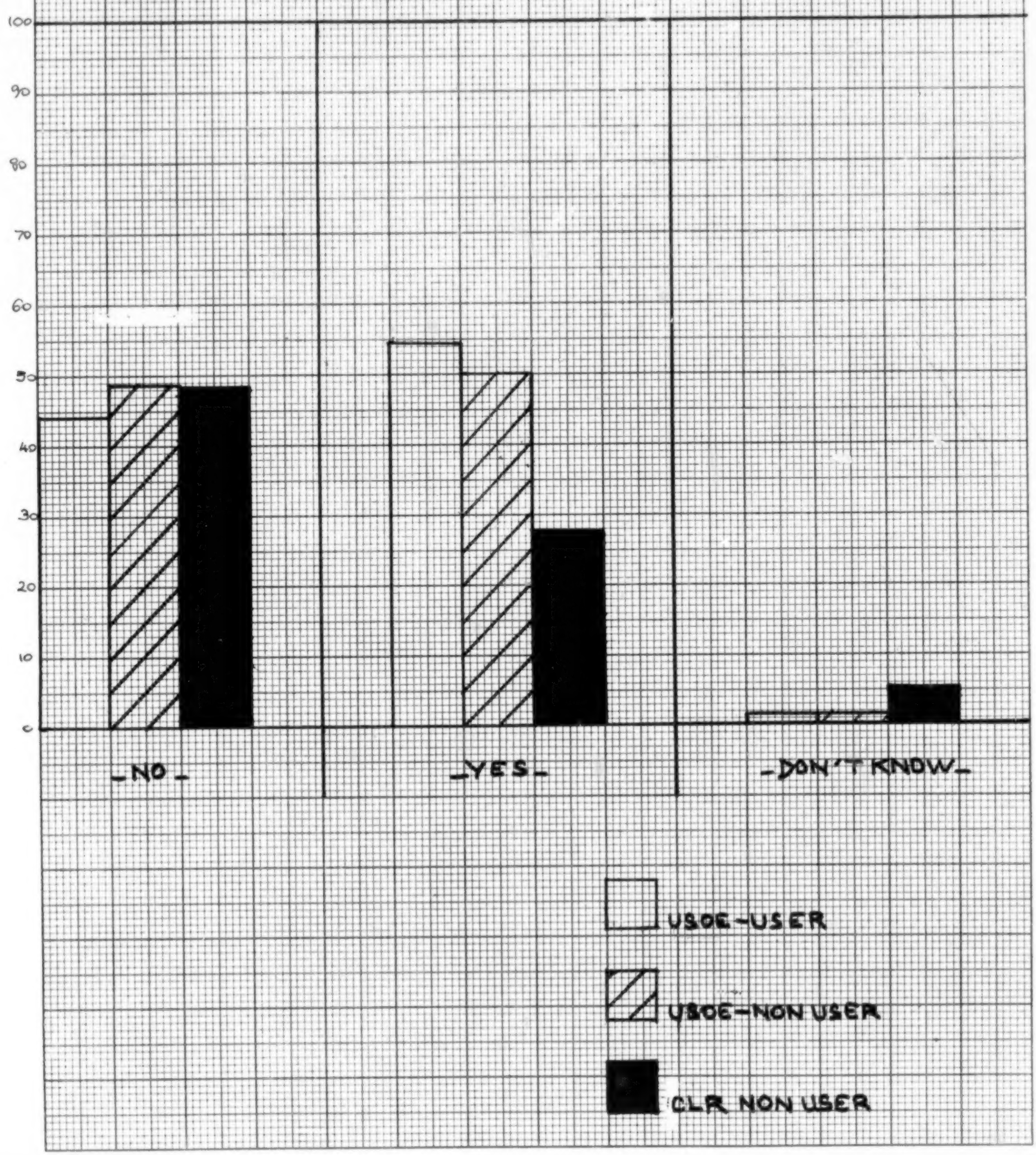
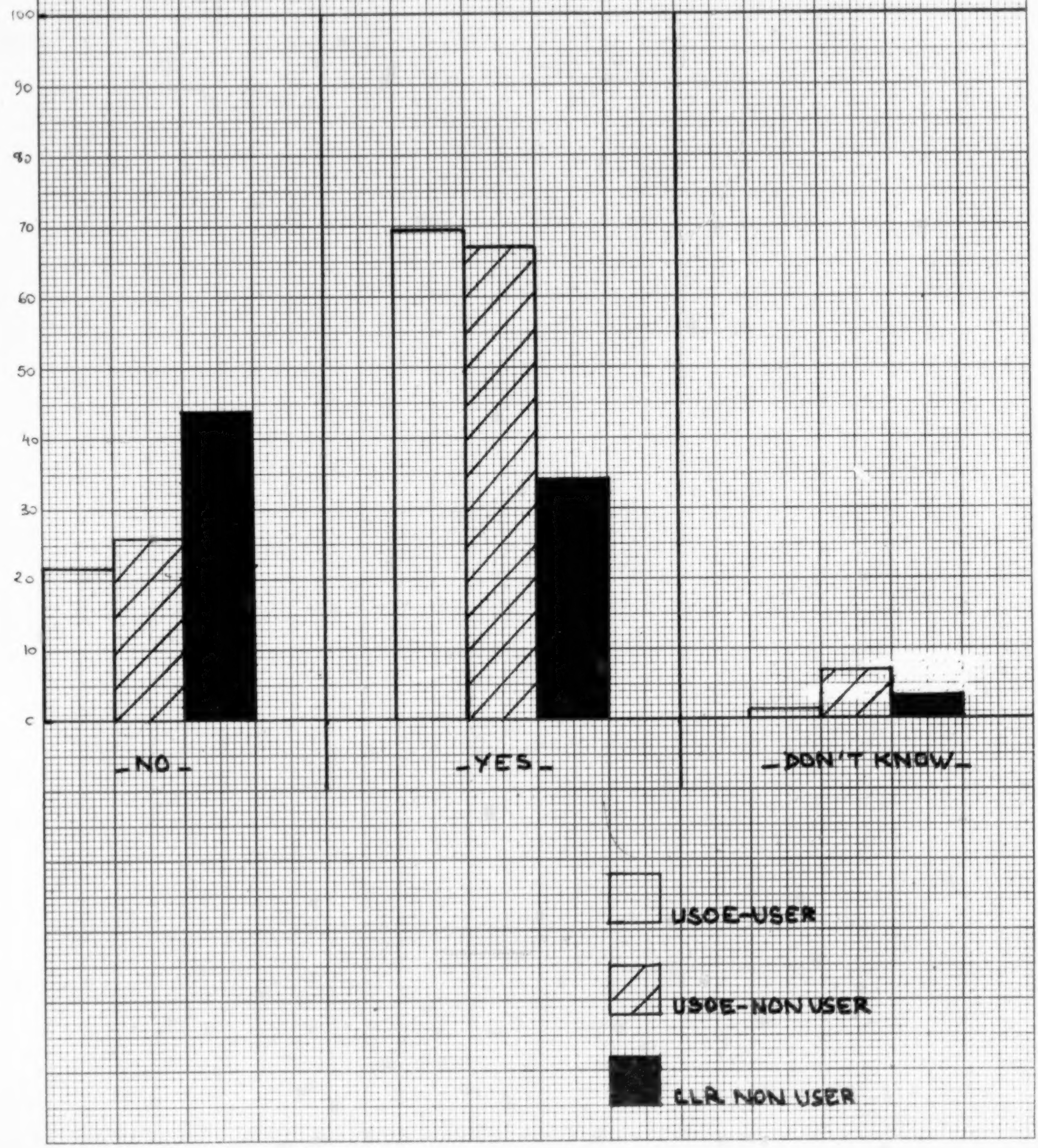


TABLE 9

II.5 Do you feel well able to do research in the library?



to admit weaknesses in front of the interviewer, unlike the CLR survey which was done by questionnaire and had the inherent anonymity of this approach. This point is further illustrated by the response in Table 10 wherein the USOE group mostly replied in the negative to the question whether or not they are at a loss when doing a term paper. Eighty two to 86% indicated some degree of confidence in library use. The CLR non-user illustrates the more likely response when 40% if this group states that they are at a loss in this situation.

The library should offer library use instruction according to 90-93% of the USOE group in Table 11. Even the CLR non-users feel somewhat strongly (61%) on this question. However, 30% of the CLR non-user group thinks that the library should not offer courses etc., in how to use libraries and their resources.

Although a large number of each group feels the library should provide library user education programs, the taking advantage of these programs (Table 12) is not as certain. Among the USOE group 41-45% would not take such courses. On the positive side is the fact that 38% of the CLR non-users would and even more of the USOE users/non-users (39-48%) would take the opportunity to do so.

Table 13 illustrates the response to the cliche "The library is the heart of the university". From 35-51% of the respondents disagree.

Over 80% of all groups (Table 14) indicate they have the feeling

TABLE 10

II.6 Are you at loss when faced with doing a term-paper in the library?

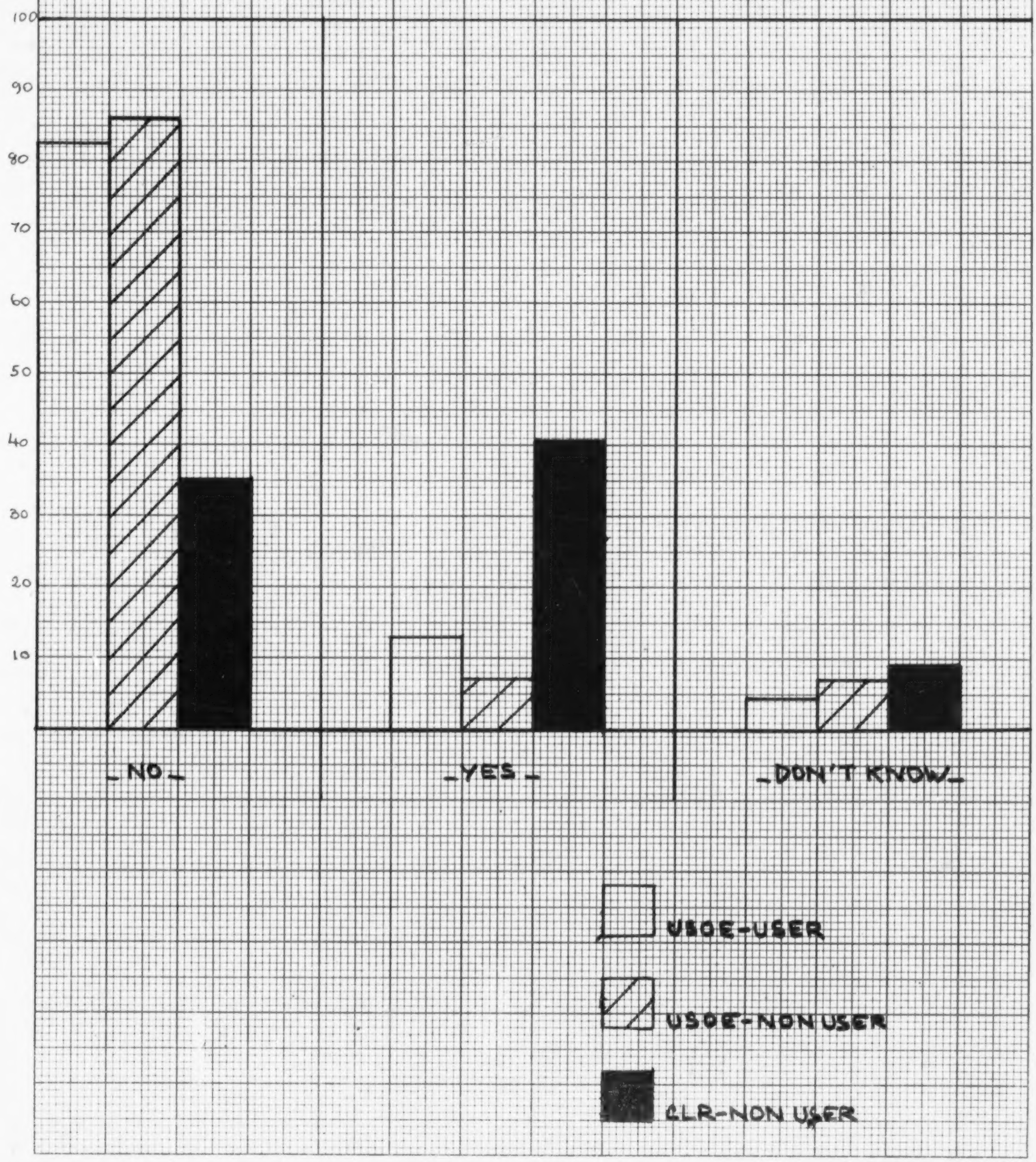


TABLE 11

II.7 Do you think that the library should offer courses, clinics, etc. in how to use libraries and their resources?

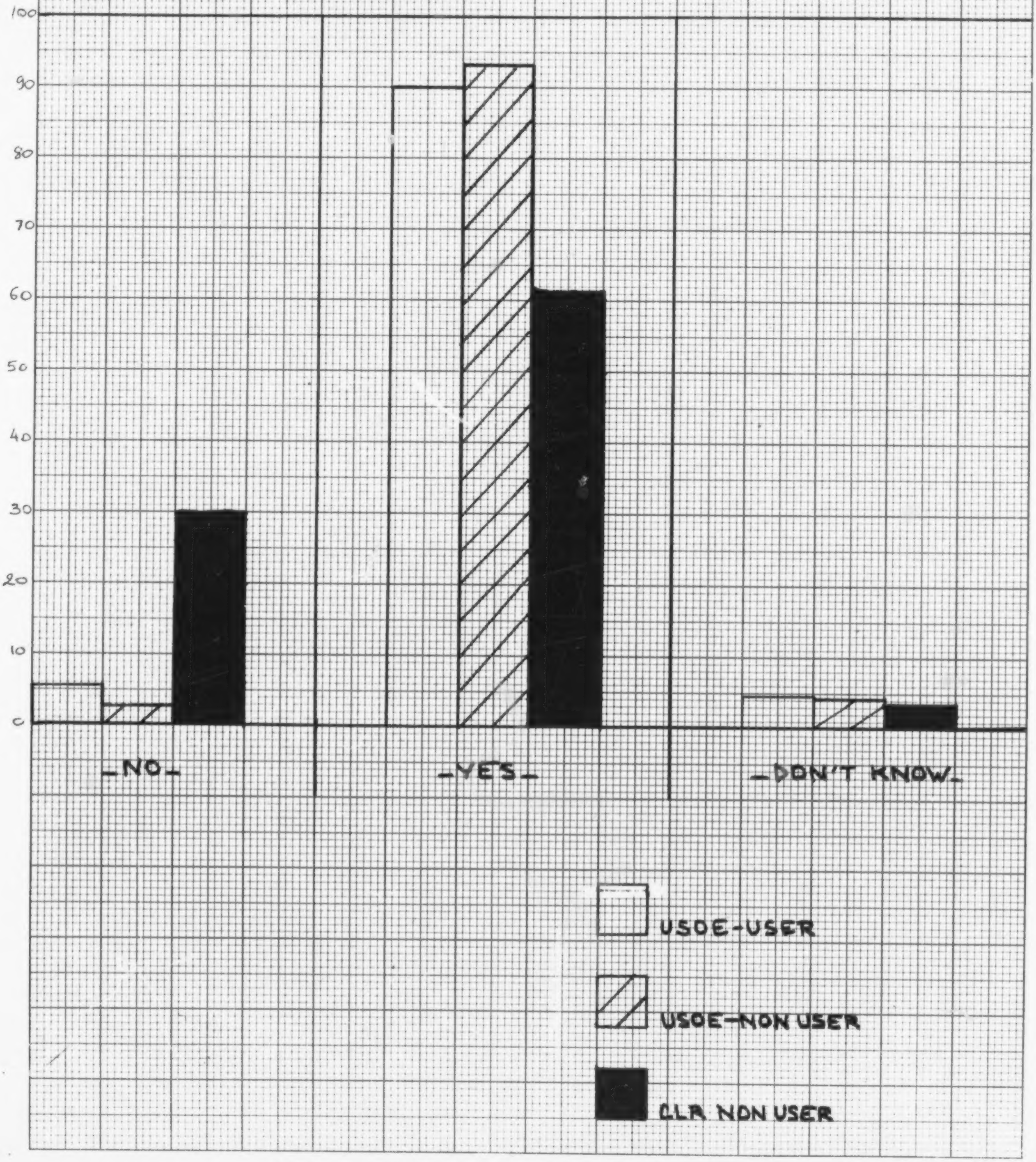


TABLE 12

II.8 Would you take such courses, clinics, etc. if offered at a convenient time?

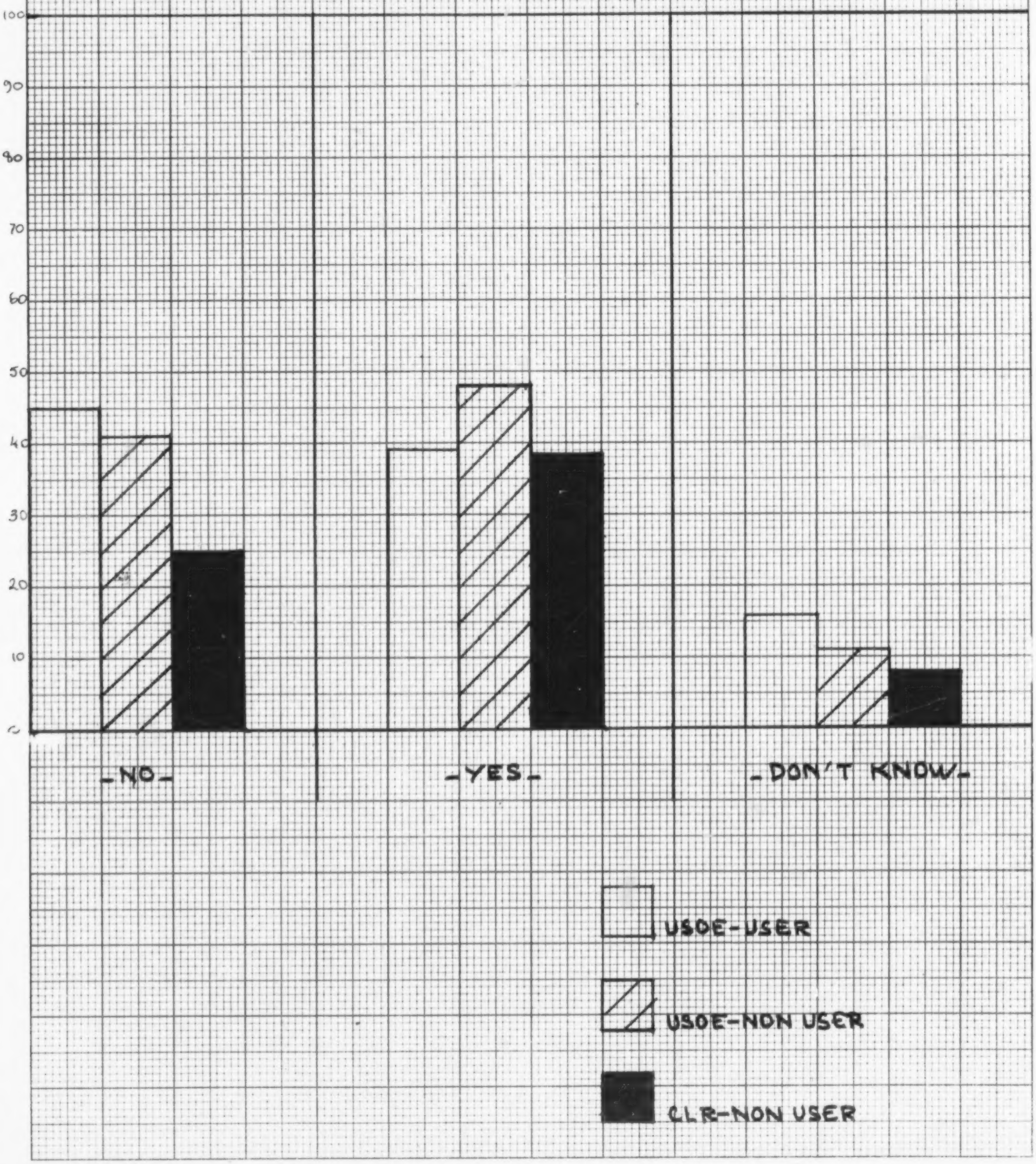
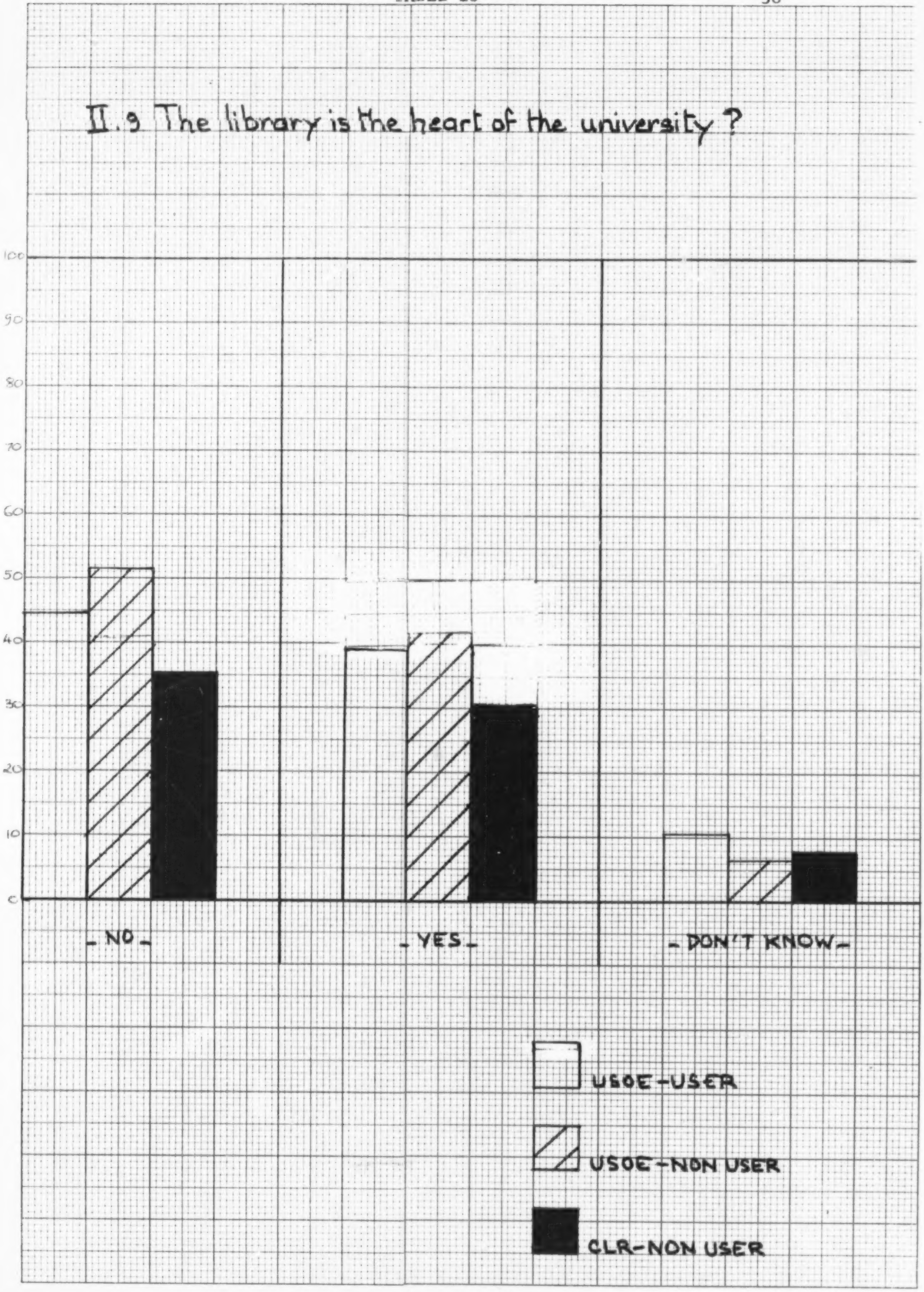


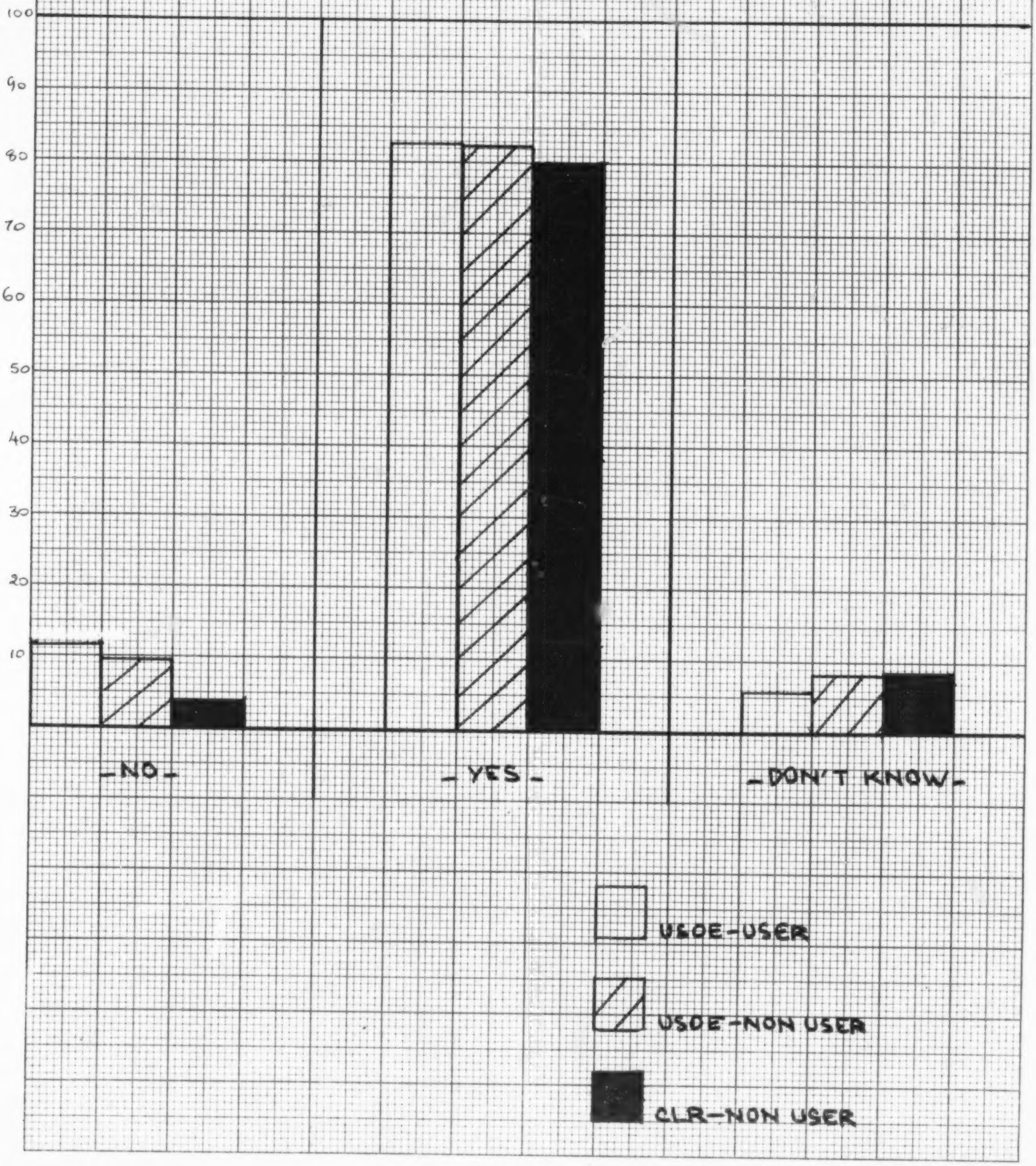
TABLE 13



II.9 The library is the heart of the university ?

TABLE 14

II.10 Whenever you do a research paper in the library do you get a feeling that there are information resources on your topic which you are somehow missing?



they're missing information resources. A number of them do not consider this to be necessarily a matter of their not knowing how if we look at the responses to Table 10 where over 80% of the USOE group felt confident in using the library for term papers.

Some of the students are not alone in their assumption of confidence in library use since as Table 15 reveals in the USOE and CLR groups 81-90% think that instructors assume students already know enough about using the libraries to do an in-depth paper. When the response to Table 7 is considered and that from 41-55% of the respondents in all groups feel their library use knowledge is not considered by professors in grading, the students' conclusions in Table 15 are fairly safe ones. Certainly, some level of facility in library use is understood and expected by the faculty but what this level is has yet to be determined. Certain studies (Hurt, Lee, Perkins) have pointed out that students' knowledge of using the library is poor at best. Since evidence to the contrary appears to be non-existant then a low level of expertise in library use may be being accepted by the teaching faculty.

Table 16 is interesting because the CLR-Non-user indicates a strong frustration in using the library. Forty-four percent state they are 50% or below successful in using the library while only 9-18% of the USOE group place themselves in this category. Only 19% of the CLR non-user group indicate they are 75%+ successful in using the library as contrasted to 40-42% for the USOE group.

The concept of specialized assistance in libraries has considerable

TABLE 15

II.11 Do instructors assume that you already Know enough about using libraries to do an in-depth term paper ?

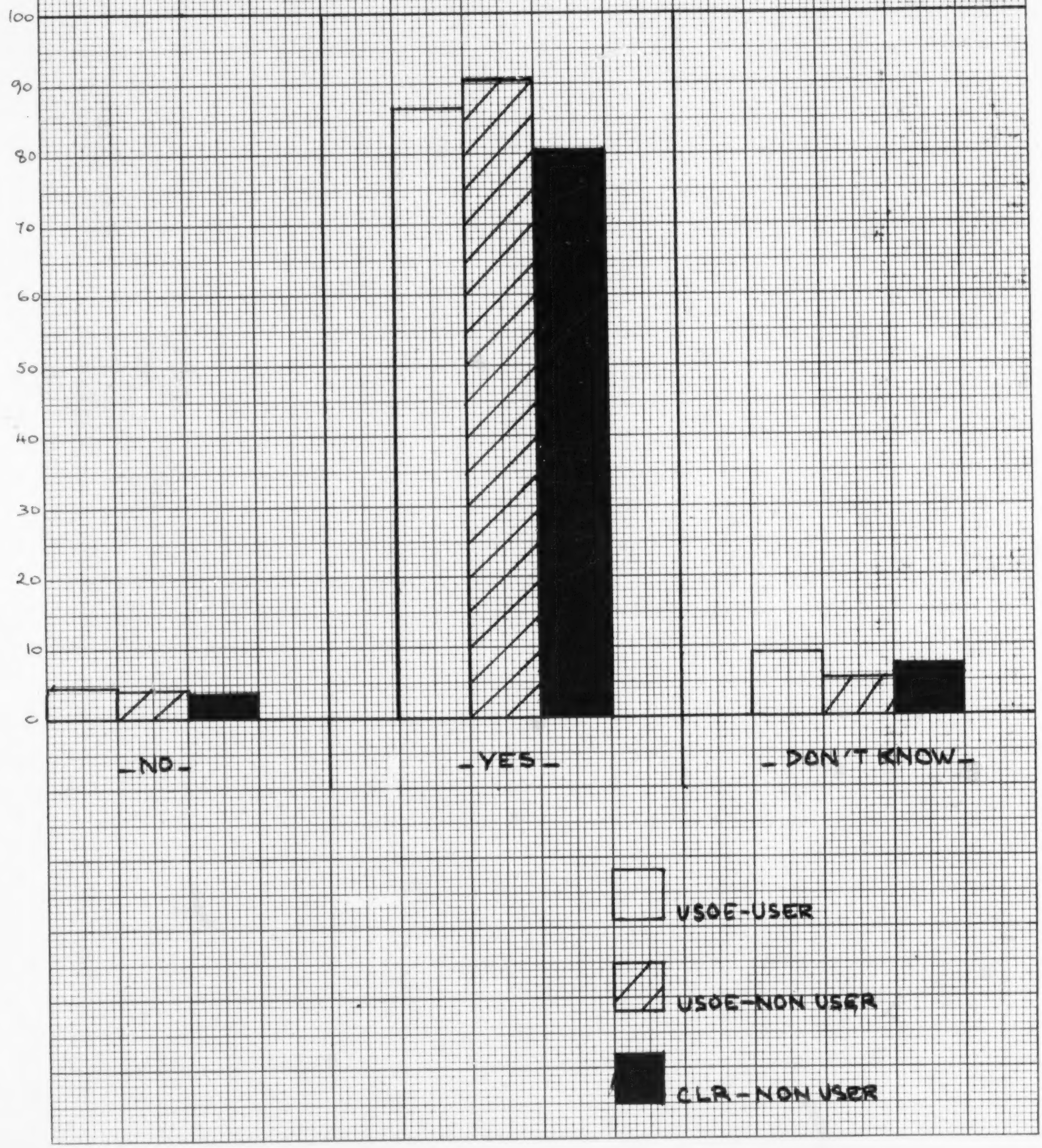
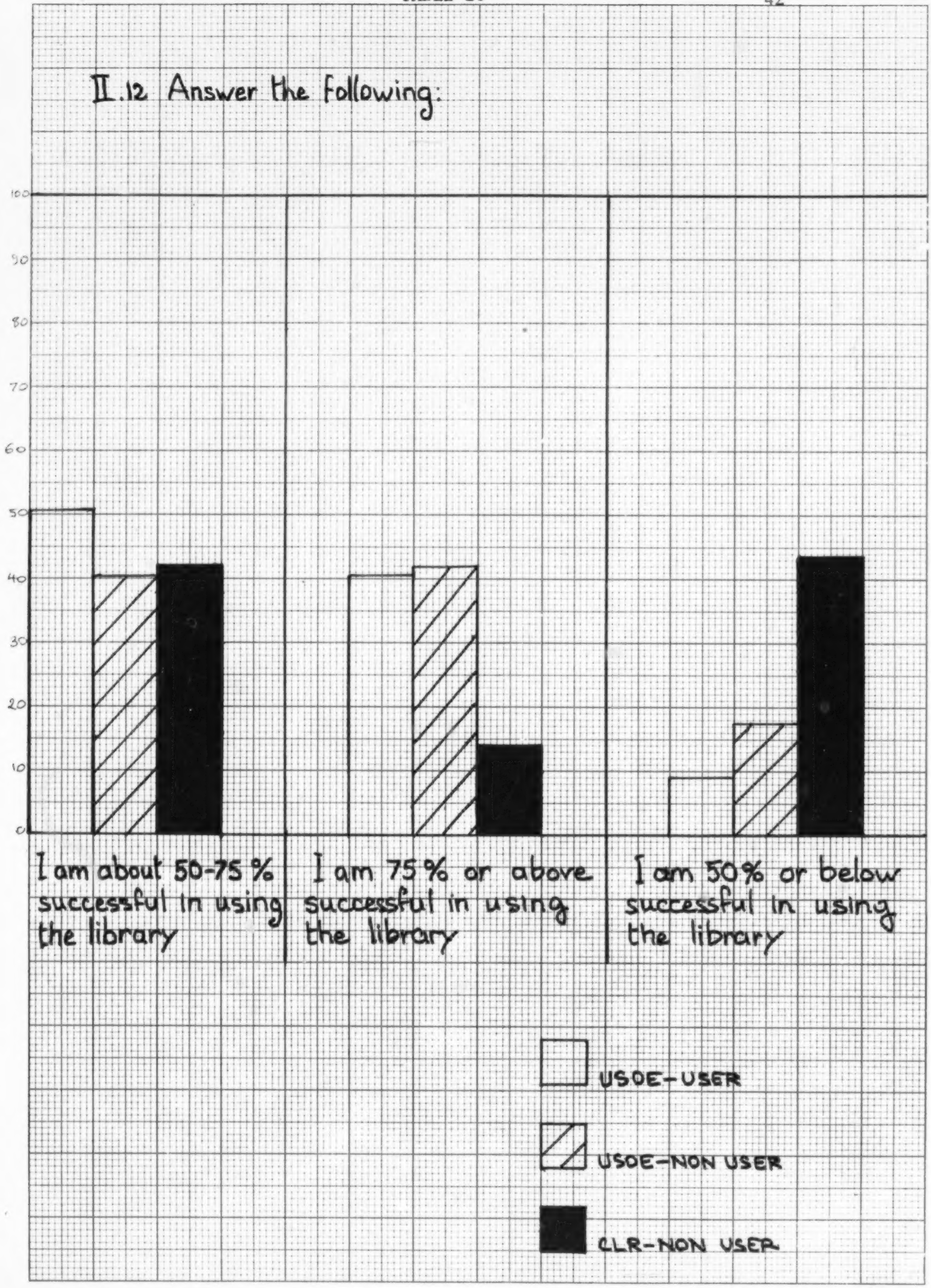


TABLE 16


II.12 Answer the following:
100
90
80
70
60
50
40
30
20
10
0
I am about 50-75 % successful in using the library
I am 75 % or above successful in using the library
I am 50 % or below successful in using the library
USOE-USER
USOE-NON USER
CLR-NON USER

support among the respondents. Table 17 indicates how in all groups 88-97% claim they would make use of "information specialists".

Table 18 reveals that over 50% of the CLR non-users do not have course assignments involving the use of library resources beyond reserve books. The USOE user/non-user group account for 21-31% in this category. It is notable how the USOE group responded to the question of whether or not their assignments went beyond reserve book reading. Sixty-three to 77% state that their assignments involve using library resources in addition to assigned reading.

TABLE 17

II.15 If the library staff included an information specialist in your subject area would you use that person?

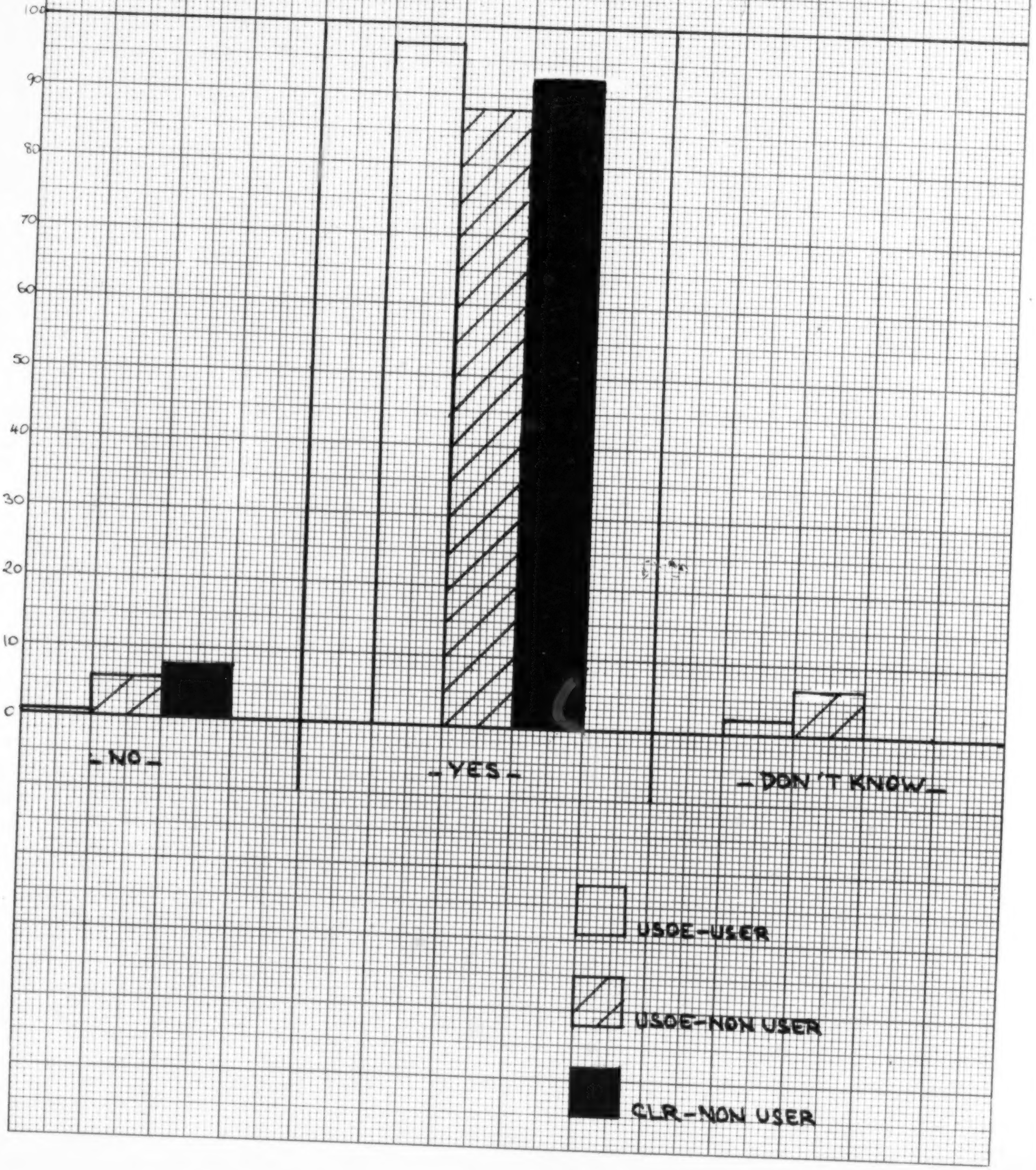
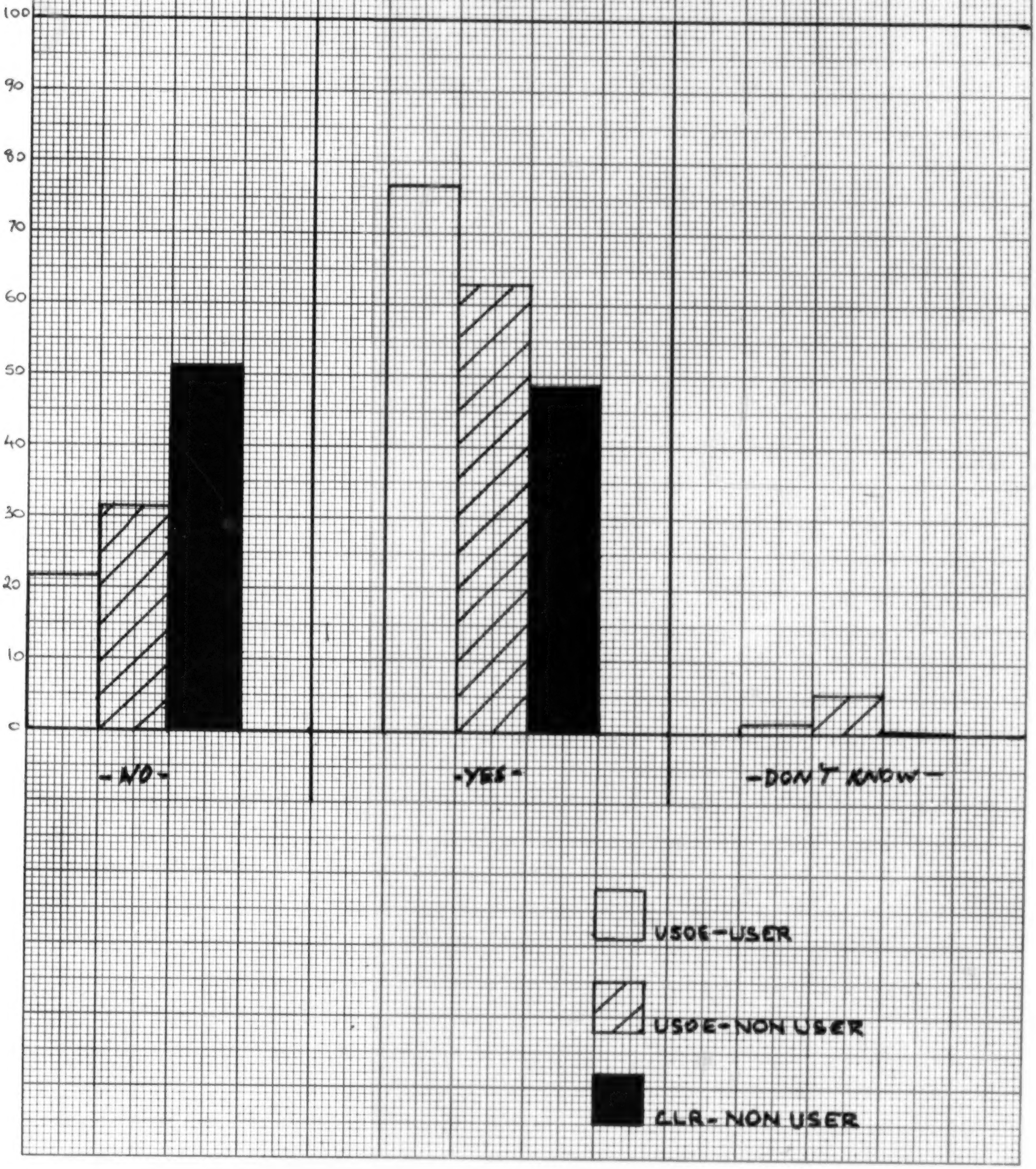


TABLE 18

II.16 Do assignments in your courses usually involve using library resources other than just books placed on reserve by professors ?



8. Conclusions

This study has shown that computer-based circulation data, with proper manipulation can produce administratively useful information in collection development, budget allocation, and random selection of survey samples.

The matter of "use or non-use" equating whether or not a user borrows a book for home use has been questioned. It may be that there is little relationship in home use of books by users and the frequency of in-house library "use". In other words, it appears from this study that a user need not charge out books to be a frequent "user" of the library.

Additionally, more sophisticated studies can be made beyond this study by other institutions where they have access to a machine readable shelf-list and student registration information.

9. Recommendations

Since the data base used for these studies is similar to those available in other computer based circulation systems it is feasible that the approaches taken in this study can be applied elsewhere as well.

Additional studies are quite feasible and should be investigated. A partial list of these for future investigation are charted in the following matrix of "Possible Studies with Machineable Circulation Data Files." It should be mentioned that a variety of computer-based files other than the circulation file alone may be used in circulation studies. The more files available to a library the more types of studies are possible. For example, a machine-readable shelf-list is valuable if a study is to be made of the non-use of a certain subject area. For studies such as this the need to have access to the "Universe" of books is important. The same rationale exists for a user study. To attain total figures of use and non-use, the universe of users (potential and real) must be known.

In doing such studies, the accuracy (completeness and currency) of non-library computer files should be evaluated. A case in point would be university-wide address files. If such an address file has not been kept up-to-date or been purged of obsolete records then a number of problems will be encountered in using such a file for a specialized library application.

POSSIBLE STUDIES WITH MACHINEABLE CIRCULATION DATA FILES

Data elements in Available files	Volume of Circulation (by subject)	Work loads by hour, session	Subject use of books	User affiliation (by Dept.)	Collection evaluation by use & non-use	Non-users and users	Fines - overdues	Inventories	Circulation of books by type of purchase	Predictio of future use
Book's call number	X		X	X	X	X		X	X	X
User's status:										
FROSH				X	X	X				X
SOPH				X	X	X				X
JR.				X	X	X				X
SR.				X	X	X				X
5th Yr.				X	X	X				X
GR				X	X	X				X
FAC				X	X	X				X
STAFF				X	X	X				X
Dept/Major of User				X	X	X				
Registration data (e.g QPA of users) student number				X	X	X				X
Date & Hour of transaction discharge - charge	X	X	X				X			X
Charge-out record for each book (cumulative)	X		X	X	X	X	X			X
Overdue notices issued							X			
Financial (fines) information							X			
Holds placed on a book										X

NOTE: The programs created for this project were designed to manipulate a specific data base and a variety of other unique files. All programs are available in machine-readable form from the University of Colorado Libraries at creation costs but the value of these unique systems should be understood to be low in terms of transferability. The methodology and programs used in the present study should be examined in order to obtain insights into the input, manipulation techniques, and results--in order to build a better and more far-ranging system rather than attempt to use these programs to replicate the study presented here.

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Addenda

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APPENDIX I-1

UNIVERSITY OF COLORADO

LIBRARY USE STRUCTURED INTERVIEW

Respondent's Name________________________

Dept.________________________

QPA ________________________

____ Wants results of study

____ User ____ Non-user

Enter time the interview began: _________ AM _________PM

INTRODUCTORY STATEMENT TO RESPONDENT:

This survey is to try to work out recommendations on ways the Library can be more useful to the University of Colorado students and faculty. It is meant to identify your library experiences and attitudes as they may relate to the CU Library and to libraries in general.

YOUR RESPONSES TO THIS SURVEY WILL BE KEPT STRICTLY CONFIDENTIAL.

I. The first thing we would like to do is to obtain some background information about you. OKAY?

1. Your department or major at CU is: ____

2. What is your status at CU?

____Freshman
____Sophomore
____Junior
____Senior

____Master's Program
____Doctoral Program
____Other

3. If you are not a graduate student, do you intend to do graduate study?

No________ Yes________ Don't Know________

4. Do you know yet when you receive your degree, what profession you'll enter?

____

5. Do you live on ________ or ________ off campus?

6. Do you use other academic libraries in this area?

No________ Yes________

7. How often do you the CU Libraries (Norlin and/or the branches):

________More than once a week
________More than 8 times a semester
________Few times a semester
________Very seldom, or never

If either of the last two categories are checked ask: What in your opinion is the reason? Is it any of the following:

________My courses don't require library use
________The library is inadequate for my purposes
________I don't care for the library environment
________Other ____

8. Here at CU do you use a departmental (branch) library?

No________ Yes________

9. Do you use a professor's or someone else's personal library?

No________ Yes________

If yes, is the use of these libraries sufficient for you to get by at the university?

No________ Yes________ Don't know________

10. Did your high school have a library?

No________ Yes________ Don't know________

If yes, did you use the high school library more than you now use the CU libraries?

Yes, more______ No, less______ No, about the same______

11. Were you given an introduction to the use of the school library?

No________ Yes________ Don't know________

If yes, how useful was this introduction?

________Effective
________Ineffective
________Not relative
________Depend on it now

(EXPLORE)____

____

12. Didyou use the public library in your community?

No________ Yes________

If yes, did you use the public library more than you now use the CU libraries?

Yes, more______ No, less______ No, about the same______

13. Was any library use instruction given you in the public library?

No________ Yes________ Don't know________

II. Here are some general questions. Please answer with yes, no or don't know for each question.

1. Do you generally find that a bibliography at the end of your term papers is graded on quantity rather than the quality of the citations?

No________ Yes________ Don't know________

2. Do your professors, in general, encourage students to use the library?

No________ Yes________ Don't know________

3. Is your expertise or lack of it in library use taken into account by your professors when they grade your papers?

No________ Yes________ Don't know________

4. Has your undergraduate training (so far) given you all the preparation you need for finding information in the library?

No________ Yes________ Don't know________

5. Do you feel well able to do research in the library?

No________ Yes________ Don't know________

6. Are you at a loss when faced with doing a term paper in the library?

No________ Yes________ Don't know________

7. Do you think the library should offer courses, clinics (e.g. the term paper clinic), etc., in how to use libraries and their resources?

No________ Yes________ Don't know________

8. Would you take such courses, clinics, etc., if offered at a convenient time?

No________ Yes________ Don't know________

If yes ask: Why would you take the courses?

____

____

9. "The library is the heart of the university." Do you agree?

No________ Yes________ Don't know________

10. Whenever you do research for a paper in the library do you get the feeling that there are information resources on your topic which you are somehow missing?

No________ Yes________ Don't know________

11. Do instructors assume that you already know enough about using libraries to do an in-depth term paper?

No________ Yes________ Don't know________

12. Please answer one of the following:

______I'm about 50-75% successful in using the library
______I'm 75% or above successful in using the library
______I'm 50% successful or below in using the library

13. If you were assigned the job of developing a new process or a new procedure, would you be apt to consult the literature as to what had already been done?

No________ Yes________ Don't know________

If yes, would you know how to go about this?

No________ Yes________ Don't know________

14. Whom would you ask for guidance to find already-available information?

______Faculty
______Classmates
______Librarian
______Researchers in that field
______Other (explore)________________________________
____

15. If the library staff included an information specialist in your subject area, would you use that person?

No________ Yes________ Don't know________

16. Do assignments in your courses usually involve using library resources other than just books placed on reserve by professors?

No________ Yes________ Don't know________

III. In this last section, we are interested in your rating a variety of things in and about the library. Please indicate your response to each set.

1. Do you feel that you would like more information and/or explanation on any of these library services/facilities. (Check as many as apply.) (GIVE RESPONDENT CARD A.)

_____ Card catalogs
_____ Periodicals indexes or abstracts
_____ Government documents
_____ Reference books (bibliographies, encyclopedias, etc.)
_____ Interlibrary loan
_____ Audio-visual materials
_____ The help of reference librarians
_____ Photocopying service
_____ Serials book catalog
_____ Reserve Books
_____ Current periodicals
_____ Bound periodicals
_____ Newspapers
_____ Information desk
_____ Library tours
_____ "Dissertation acupuncture"
_____ Term paper clinic
_____ Bibliography courses

2. Regarding any of the services/facilities you have not used in the library, was it because you: (Check those that apply.) (GIVE RESPONDENT CARD B.)

_____ didn't know they even existed
_____ were aware of them but didn't have time
_____ didn't want to ask about how to use them
_____ felt no need to use them
_____ figured it wasn't worth the time spent using them
_____ thought only librarians were supposed to use them
_____ couldn't locate the service even though I knew it existed.
_____ Other ____

3. When you walk into a library you feel: (Check as many that apply.) (GIVE RESPONDENT CARD C.)

_____ relaxed, want to pick up an interesting book and read
_____ curious, want to browse through the books
_____ purposeful, want to do some serious work
_____ frustrated, want to get what I need without being there half a day
_____ cooped-up, want to get outside and breathe deeply
_____ Other____

4. Do you think librarians are: (Check those that apply.) (GIVE RESPONDENT CARD D.)

_____ possessive of their books
_____ reluctant to tell you about library services
_____ over-worked, too busy to help me
_____ resentful of any intrusion
_____ really interested in my problems
_____ Other____

5. Which of the following do you consider valuable to a student regardless of his study areas: (GIVE RESPONDENT CARD E.)

_____ knowledge of use of bibliographies, abstracts, and indexes
_____ awareness of pertinent literature in fields related to his own field
_____ knowledge of how to look for specific information
_____ knowledge of one or more foreign languages
_____ Other____

6. On a campus there are among students 40% non-users of libraries. Why do you think this is so and what, if anything, can be done to change this so more people use libraries. Or should more people use the library? (Summarize briefly:)

7. Now that we have been speaking for sometime, are there any comments or suggestions you would care to offer? (Listen, and summarize briefly.)

At this point, be sure to do the following:

(1) Thank the respondent.

(2) Bring the interview to a close with a casual remark, such as, "Are you glad that's over?" etc.

PLEASE COMPLETE THE FOLLOWING IMMEDIATELY AFTER THE INTERVIEW

Time Interview Ended ________A.M.

________P.M.

Length of Interview________________________________

Date of Interview________________________________

Place of Interview________________________________

Your signature________________________________

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NAME                    ADDRESS                   CITY       STATE-ZIP        TELEPHONE  MAJOR  CLASS        APPENDIX IA
   DENNIS RALPH         BAKER 141                 BOULDER      CO80302                    185    2
     A 100041783452378571311111 3AS 2172 1    511213     1   185P


  RICHARD LOUIS         864 14TH ST               BOULDER      CO80302         4424226    135    4
     A 100038275748164623212111 3AS 4172 1    5107254424226    1350


 DOUGLAS MARTIN                                                                           113    4
     A 130848947800000000012111 2AS 4172 1    510526           113
```

I.D. Number
College
Year
Birth Date (Yr.Mo.Day)
Major

```
                                                    -USERS-                                                            APPENDIX IB

                         2790 DARTMOUTH                BOULDER         CO80302        4941666   455   6

          A 1000394321         12111 3GR 6172 1    45022349416661   455

(Books charged out   E*185.6*M95*1944A*V.1&&&&&&&&&&&&&&&   1107  0029    00     E*185.61*H75&&&&&&&&&&&&&&&&&&&&&&&&   1105  1345    00
     by user)        E*185.61*H75&&&&&&&&&&&&&&&&&&&&&&&&   1201  2175    00     E*185.61*L22&&&&&&&&&&&&&&&&&&&&&&&&   1201  2176    00
                     E*185.61*M38*C.1&&&&&&&&&&&&&&&&&&&&   1201  2175    00     E*185.61*N872*C.1&&&&&&&&&&&&&&&&&&&   1201  2176    00
                     E*185.615*C32*1967A*C.2&&&&&&&&&&&&&   1201  2175    00     E*185.615*H38&&&&&&&&&&&&&&&&&&&&&&&   1105  1343    00
                     E*185.8*A55&&&&&&&&&&&&&&&&&&&&&&&&&   1107  0027    00     E*185.8*B55*C.2&&&&&&&&&&&&&&&&&&&&&   1118  1418    00
                     E*185.8*B8*C.2&&&&&&&&&&&&&&&&&&&&&&   1118  1418    00     E*185.8*C9*C.2&&&&&&&&&&&&&&&&&&&&&&   1118  1417    00
                     E*185.8*G58*1963&&&&&&&&&&&&&&&&&&&&   1107  0043    00     E*185.8*K22*C.2&&&&&&&&&&&&&&&&&&&&&   1107  0043    00
                     E*185.8*N43*C.1&&&&&&&&&&&&&&&&&&&&&   1107  0028    00     E*185.8*N64*C.2&&&&&&&&&&&&&&&&&&&&&   1107  0042    00
                     E*185.8*R6*C.2&&&&&&&&&&&&&&&&&&&&&&   1107  0045    00     E*185.92*H6*C.1&&&&&&&&&&&&&&&&&&&&&   1105  1344    00
                     E*185.92*H6*C.1&&&&&&&&&&&&&&&&&&&&&   1201  2177    00     HT*155*A3*C.3&&&&&&&&&&&&&&&&&&&&&&&   1328  1543    00
                     HT*155*H5*C.3&&&&&&&&&&&&&&&&&&&&&&&   1328  1544    00     HT*334*U5C65*C.3&&&&&&&&&&&&&&&&&&&&   1328  1544    00
                     37503&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&   1107  0044    00     41836&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&   1118  1417    00
                     HT*155*H5*C.3&&&&&&&&&&&&&&&&&&&&&&&   1328  1544    00     HT*334*U5C65*C.3&&&&&&&&&&&&&&&&&&&&   1328  1544    00
     NUMBER OF BOOKS USED - 0024


          ROGER GRIFFITH      WAGON WHEEL APTS 112         BOULDER         CO80302        4420786   159   4

            A 10003756557284120712111 3AS 4172 1    51110644207865   1590

                     DS*918*F36*C.1&&&&&&&&&&&&&&&&&&&&&&   1312  1249    00     DS*918*H515&&&&&&&&&&&&&&&&&&&&&&&&&   1326  1265    00
                     DS*921.8*G6&&&&&&&&&&&&&&&&&&&&&&&&&   1312  1240    00     F*7*M82*1956A&&&&&&&&&&&&&&&&&&&&&&&   2039  1268    00
                     F*7*R8&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&   2039  1269    00     JK*2316*S8&&&&&&&&&&&&&&&&&&&&&&&&&&   1294  1248    00
                     JK*2319*N56M86&&&&&&&&&&&&&&&&&&&&&&   1271  1269    00     JX*1981*P7R86&&&&&&&&&&&&&&&&&&&&&&&   1312  1240    00
                     JX*5763*I53B8*1969&&&&&&&&&&&&&&&&&&   2044  1572    00     JX*5771*J64&&&&&&&&&&&&&&&&&&&&&&&&&   2046  1269    00
                     JK*2319*N56M86&&&&&&&&&&&&&&&&&&&&&&   1271  1269    00     JX*1981*P7R86&&&&&&&&&&&&&&&&&&&&&&&   1312  1240    00
     NUMBER OF BOOKS USED - 0010
```

GROSS USE VALUES BY SUBJECT AS EXPRESSED IN TIMES AND PERCENTAGE OF USE (INCLUDING RENEWALS)

CC CLASS NAME	TOTAL	ONE	TWO	THREE	4-6	7-9	10+
Call No.		No. %	No. %	No. %	No. %	No. %	No. %
S*	246	90 .37	56 .23	54 .22	46 .19	00 .00	00 .00
SB	209	74 .35	62 .30	36 .17	37 .18	00 .00	00 .00
SD	34	19 .56	12 .35	03 .09	00 .00	00 .00	00 .00
SF	155	45 .29	46 .30	33 .21	31 .20	00 .00	00 .00
SK	61	24 .39	10 .16	15 .25	12 .20	00 .00	00 .00
T*	685	272 .40	196 .29	108 .16	102 .15	07 .01	00 .00
TA	152	44 .29	38 .25	33 .22	37 .24	00 .00	00 .00
TJ	08	02 .25	06 .75	00 .00	00 .00	00 .00	00 .00
TK	109	62 .57	34 .31	09 .08	04 .04	00 .00	00 .00
TP	77	12 .16	26 .34	18 .23	21 .27	00 .00	00 .00
TS	14	09 .64	02 .14	03 .21	00 .00	00 .00	00 .00
TX	277	59 .21	56 .20	36 .13	112 .40	14 .05	00 .00
U*	283	56 .20	60 .21	42 .15	118 .42	07 .03	00 .00
UA	524	148 .28	126 .24	99 .19	135 .26	16 .03	00 .00
UD	134	41 .31	42 .31	24 .18	27 .20	00 .00	00 .00
UH	09	03 .33	00 .00	06 .67	00 .00	00 .00	00 .00
V*	41	16 .39	16 .39	03 .07	06 .15	00 .00	00 .00
VA	35	15 .43	08 .23	03 .09	09 .26	00 .00	00 .00
VD	00	00 .00	00 .00	00 .00	00 .00	00 .00	00 .00
VE	03	03 .99	00 .00	00 .00	00 .00	00 .00	00 .00
VK	92	33 .36	14 .15	15 .16	22 .24	08 .09	00 .00
Z*	904	372 .41	234 .26	126 .14	158 .18	14 .02	00 .00
00	02	00 .00	02 .99	00 .00	00 .00	00 .00	00 .00
01	25	21 .84	04 .16	00 .00	00 .00	00 .00	00 .00
02	38	21 .55	06 .16	06 .16	05 .13	00 .00	00 .00
03	00	00 .00	00 .00	00 .00	00 .00	00 .00	00 .00
04	00	00 .00	00 .00	00 .00	00 .00	00 .00	00 .00
05	16	07 .44	06 .38	03 .19	00 .00	00 .00	00 .00

APPENDIX IIA-2

GROSS USE VALUES BY SUBJECT AS EXPRESSED IN TIMES AND PERCENTAGE OF USE

CC	CLASS NAME	TOTAL	ONE	TWO	THREE	4-6	7-9	10+
06		06	06 .99	00 .00	00 .00	00 .00	00 .00	00 .00
07		56	37 .66	10 .18	09 .16	00 .00	00 .00	00 .00
08		00	00 .00	00 .00	00 .00	00 .00	00 .00	00 .00
09		01	01 .99	00 .00	00 .00	00 .00	00 .00	00 .00
10		35	22 .63	10 .29	03 .09	00 .00	00 .00	00 .00
11		68	19 .28	16 .24	03 .04	20 .29	00 .00	10 .15
12		27	14 .52	04 .15	09 .33	00 .00	00 .00	00 .00
13		00	00 .00	00 .00	00 .00	00 .00	00 .00	00 .00
14		68	26 .38	20 .29	18 .27	04 .06	00 .00	00 .00
15		01	01 .99	00 .00	00 .00	00 .00	00 .00	00 .00
16		12	10 .83	02 .17	00 .00	00 .00	00 .00	00 .00
17		135	85 .63	24 .18	12 .09	14 .10	00 .00	00 .00
18		178	60 .34	54 .30	27 .15	26 .15	00 .00	11 .06
19		263	109 .41	72 .27	36 .14	46 .18	00 .00	00 .00
20		72	29 .40	22 .31	09 .13	12 .17	00 .00	00 .00
21		36	27 .75	06 .17	03 .08	00 .00	00 .00	00 .00
22		175	65 .37	62 .35	36 .21	12 .07	00 .00	00 .00
23		76	48 .63	18 .24	06 .08	04 .05	00 .00	00 .00
24		12	08 .67	04 .33	00 .00	00 .00	00 .00	00 .00
25		05	02 .40	00 .00	03 .60	00 .00	00 .00	00 .00
26		52	29 .56	06 .12	09 .17	08 .15	00 .00	00 .00
27		108	57 .53	42 .39	09 .08	00 .00	00 .00	00 .00
28		64	44 .69	14 .22	06 .09	00 .00	00 .00	00 .00
29		639	127 .20	140 .22	129 .20	211 .33	32 .05	00 .00
30		312	122 .39	74 .24	39 .13	63 .20	14 .05	00 .00
31		780	707 .91	48 .06	12 .02	13 .02	00 .00	00 .00
32		1682	1298 .77	224 .13	90 .05	70 .04	00 .00	00 .00
33		1310	1151 .88	98 .08	24 .02	37 .03	00 .00	00 .00

APPENDIX IIA-3

GROSS USE VALUES BY SUBJECT AS EXPRESSED IN TIMES AND PERCENTAGE OF USE

CC	CLASS NAME	TOTAL	ONE	TWO	THREE	4-6	7-9	10+
90		93	49 .53	12 .13	12 .13	20 .22	00 .00	00 .00
91		688	350 .51	196 .29	63 .09	65 .09	14 .02	00 .00
92		656	368 .56	168 .26	54 .08	66 .10	00 .00	00 .00
93		190	74 .39	44 .23	51 .27	21 .11	00 .00	00 .00
94		665	386 .58	166 .25	66 .10	39 .06	08 .01	00 .00
95		180	97 .54	54 .30	21 .12	08 .04	00 .00	00 .00
96		22	12 .55	04 .18	06 .27	00 .00	00 .00	00 .00
97		404	213 .53	124 .31	33 .08	34 .08	00 .00	00 .00
98		33	05 .15	02 .06	00 .00	10 .30	16 .49	00 .00
99		00	00 .00	00 .00	00 .00	00 .00	00 .00	00 .00
	SUMMARY OF ALL VALUES LISTED	253439	101100 .40	49110 .19	37086 .15	52688 .21	11214 .04	2241 .01

USE VALUES EXCLUDING MULTIPE USE BY THE SAME PERSON AS EXPRESSED IN TIMES AND PERCENTAGE

CC	CLASS NAME	TOTAL	ONE		TWO		THREE		4-6		7-9		10+	
Call No.		No.	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
S*		210	102	.49	56	.27	36	.17	16	.08	00	.00	00	.00
SB		197	78	.40	62	.32	33	.17	24	.12	00	.00	00	.00
SD		34	19	.56	12	.35	03	.09	00	.00	00	.00	00	.00
SF		149	45	.30	52	.35	27	.18	25	.17	00	.00	00	.00
SK		59	25	.42	10	.17	12	.20	12	.20	00	.00	00	.00
T*		573	323	.56	160	.28	57	.10	33	.06	00	.00	00	.00
TA		145	48	.33	30	.21	39	.27	28	.19	00	.00	00	.00
TJ		07	03	.43	04	.57	00	.00	00	.00	00	.00	00	.00
TK		102	67	.66	28	.28	03	.03	04	.04	00	.00	00	.00
TP		74	12	.16	32	.43	09	.12	21	.28	00	.00	00	.00
TS		12	10	.83	02	.17	00	.00	00	.00	00	.00	00	.00
TX		226	71	.31	62	.27	33	.15	60	.27	00	.00	00	.00
U*		223	72	.32	56	.25	45	.20	50	.22	00	.00	00	.00
UA		448	169	.38	126	.28	90	.20	63	.14	00	.00	00	.00
UD		112	47	.42	46	.41	15	.13	04	.04	00	.00	00	.00
UH		06	04	.67	02	.33	00	.00	00	.00	00	.00	00	.00
V*		35	17	.49	18	.51	00	.00	00	.00	00	.00	00	.00
VA		33	15	.46	08	.24	06	.18	04	.12	00	.00	00	.00
VD		00	00	.00	00	.00	00	.00	00	.00	00	.00	00	.00
VE		03	03	.99	00	.00	00	.00	00	.00	00	.00	00	.00
VK		77	38	.49	12	.16	06	.08	21	.27	00	.00	00	.00
Z*		782	413	.53	230	.29	75	.10	64	.08	00	.00	00	.00
00		02	00	.00	02	.99	00	.00	00	.00	00	.00	00	.00
01		25	21	.84	04	.16	00	.00	00	.00	00	.00	00	.00
02		34	22	.65	06	.18	06	.18	00	.00	00	.00	00	.00
03		00	00	.00	00	.00	00	.00	00	.00	00	.00	00	.00
04		00	00	.00	00	.00	00	.00	00	.00	00	.00	00	.00
05		16	07	.44	06	.38	03	.19	00	.00	00	.00	00	.00

APPZNDIX IIB-2

USE VALUES EXCLUDING MULTIPE USE BY THE SAME PERSON AS EXPRESSED IN TIMES AND PERCENTAGE

CC	CLASS NAME	TOTAL	ONE	TWO	THREE	4-6	7-9	10+
06		06	06 .99	00 .00	00 .00	00 .00	00 .00	00 .00
07		52	39 .75	10 .19	03 .06	00 .00	00 .00	00 .00
08		00	00 .00	00 .00	00 .00	00 .00	00 .00	00 .00
09		01	01 .99	00 .00	00 .00	00 .00	00 .00	00 .00
10		31	25 .81	06 .19	00 .00	00 .00	00 .00	00 .00
11		49	21 .43	20 .41	00 .00	08 .16	00 .00	00 .00
12		24	15 .63	06 .25	03 .13	00 .00	00 .00	00 .00
13		00	00 .00	00 .00	00 .00	00 .00	00 .00	00 .00
14		62	29 .47	18 .29	15 .24	00 .00	00 .00	00 .00
15		01	01 .99	00 .00	00 .00	00 .00	00 .00	00 .00
16		12	10 .83	02 .17	00 .00	00 .00	00 .00	00 .00
17		125	89 .71	20 .16	12 .10	04 .03	00 .00	00 .00
18		148	70 .47	50 .34	12 .08	16 .11	00 .00	00 .00
19		232	122 .53	68 .29	21 .09	21 .09	00 .00	00 .00
20		62	32 .52	24 .39	06 .10	00 .00	00 .00	00 .00
21		35	27 .77	08 .23	00 .00	00 .00	00 .00	00 .00
22		161	74 .46	52 .32	27 .17	08 .05	00 .00	00 .00
23		71	53 .75	08 .11	06 .09	04 .06	00 .00	00 .00
24		11	09 .82	02 .18	00 .00	00 .00	00 .00	00 .00
25		04	02 .50	02 .50	00 .00	00 .00	00 .00	00 .00
26		47	30 .64	08 .17	09 .19	00 .00	00 .00	00 .00
27		95	67 .71	28 .30	00 .00	00 .00	00 .00	00 .00
28		61	46 .75	12 .20	03 .05	00 .00	00 .00	00 .00
29		576	145 .25	142 .25	108 .19	157 .27	24 .04	00 .00
30		269	135 .50	70 .26	33 .12	31 .12	00 .00	00 .00
31		760	722 .95	22 .03	12 .02	04 .01	00 .00	00 .00
32		1587	1358 .86	148 .09	57 .04	24 .02	00 .00	00 .00
33		1273	1179 .93	54 .04	12 .01	28 .02	00 .00	00 .00

SUBJECT ARRAY BY CLASSIFICATION NUMBER, DIVIDED BY TYPE OF USER AS TO NUMBER AND PERCENTAGE

CODE	CLASS NAME	TOTAL	FRESHMEN		SOPHMORE		JUNIORS		SENIORS		GRADS.		MISC.	
Call No.			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
GN		1198	80	.07	148	.12	235	.20	243	.20	468	.39	24	.02
GT		149	04	.03	21	.14	23	.15	46	.31	51	.34	04	.03
GV		1520	118	.08	312	.21	335	.22	351	.23	358	.24	46	.03
H*		696	42	.06	38	.06	67	.10	129	.19	389	.56	31	.05
HB		1506	83	.06	108	.07	135	.09	156	.10	986	.66	38	.03
HC		3913	354	.09	295	.08	536	.14	961	.25	1698	.43	69	.02
HG		350	05	.01	06	.02	12	.03	38	.11	286	.82	03	.01
HJ		225	04	.02	08	.04	43	.19	38	.17	122	.54	10	.04
HM		3184	285	.09	365	.12	451	.14	585	.18	1410	.44	86	.03
HQ		4711	526	.11	734	.16	781	.17	1233	.26	1331	.28	106	.02
HX		836	84	.10	137	.16	168	.20	128	.15	268	.34	31	.04
J*		03	00	.00	00	.00	02	.67	00	.00	01	.33	00	.00
JA		491	44	.09	29	.06	64	.13	63	.13	287	.59	04	.01
JC		918	118	.13	114	.12	156	.17	196	.21	315	.34	19	.02
JF		212	06	.03	18	.09	22	.10	29	.14	137	.65	00	.00
JK		4762	279	.06	533	.11	948	.20	1226	.26	1602	.34	174	.04
K*		396	49	.12	32	.08	69	.17	127	.32	108	.27	11	.03
L*		97	02	.02	04	.04	05	.05	12	.12	69	.71	05	.05
LA		639	20	.03	25	.04	69	.11	129	.20	376	.59	20	.03
LB		5020	261	.05	212	.04	656	.13	889	.18	2770	.55	232	.05
LJ		1171	58	.05	116	.10	186	.16	349	.30	320	.27	142	.12
M*		4226	373	.09	690	.16	355	.08	1255	.30	1506	.36	47	.01
ML		2384	269	.11	301	.13	257	.11	473	.20	1063	.45	21	.01
MT		1061	98	.09	118	.11	91	.09	276	.26	474	.45	04	.00
N*		551	38	.07	68	.12	108	.20	151	.27	155	.28	31	.06
NA		176	25	.14	25	.14	37	.21	41	.23	45	.26	03	.02
ND		558	51	.09	68	.12	128	.23	157	.28	146	.26	18	.03
P*		1550	140	.09	164	.11	194	.13	237	.15	779	.50	30	.02

SUBJECT ARRAY BY CLASSIFICATION NUMBER, DIVIDED BY TYPE OF USER AS TO NUMBER AND PERCENTAGE

CODE	CLASS NAME	TOTAL	FRESHMEN	SOPHMORE	JUNIORS	SENIORS	GRADS.	MISC.
PA		2404	504 .21	433 .18	267 .11	275 .11	902 .38	23 .01
PB		98	02 .02	14 .14	06 .06	20 .20	48 .49	08 .08
PC		266	09 .03	11 .04	17 .06	19 .07	208 .78	02 .01
PD		1013	54 .05	69 .07	139 .14	164 .16	537 .53	50 .05
PG		2298	144 .06	192 .08	231 .10	508 .22	1209 .53	14 .01
PJ		1095	78 .07	96 .09	177 .16	286 .26	400 .37	56 .05
PN		4352	416 .10	560 .13	794 .18	1046 .24	1468 .34	68 .02
PQ		5531	535 .10	560 .11	657 .12	869 .16	2770 .50	100 .02
PR		11996	1384 .12	1931 .16	2090 .17	2413 .20	3936 .33	242 .02
PS		8544	1286 .15	1652 .19	1747 .20	1784 .21	1898 .22	177 .02
PT		2619	297 .11	375 .14	315 .12	452 .17	1081 .41	99 .04
PZ		565	98 .17	91 .16	145 .26	109 .19	104 .18	18 .03
Q*		286	10 .04	29 .10	53 .19	62 .22	125 .44	07 .02
QA		638	30 .05	52 .08	136 .22	169 .27	201 .32	48 .08
QB		213	45 .21	79 .37	51 .24	21 .10	17 .08	00 .00
QC		442	24 .05	34 .08	79 .18	92 .21	208 .47	05 .01
QD		130	13 .10	06 .05	22 .17	38 .29	34 .26	17 .13
QE		96	23 .24	16 .17	13 .14	23 .24	18 .19	03 .03
QH		365	26 .07	46 .13	71 .20	76 .21	128 .35	18 .05
QK		59	00 .00	09 .15	08 .14	16 .27	25 .42	01 .02
QL		272	13 .05	21 .08	57 .21	117 .43	58 .21	06 .02
QM		20	00 .00	01 .05	08 .40	05 .25	05 .25	01 .05
QP		140	17 .12	16 .11	19 .14	53 .38	31 .22	04 .03
QR		18	02 .11	01 .06	03 .17	11 .61	01 .06	00 .00
R*		54	07 .13	08 .15	08 .15	16 .30	14 .26	01 .02
RB		166	16 .10	23 .14	46 .28	35 .21	43 .26	03 .02
RK		08	01 .13	00 .00	01 .13	04 .50	02 .25	00 .00
RT		03	00 .00	00 .00	00 .00	01 .33	02 .67	00 .00

APPENDIX IV

Books Used 7 or More Times Per Year
(Inculding Renewals)

MATERIALS USED SEVEN OR MORE TIMES IN A PERIOD OF ONE YEAR (INCLUDING RENEWALS)

CLASSIFICATION NUMBER		Borrower ID NUMBER	YRDY	HOUR	TP	NUMBER Of Circulation
DS*821*B46*C.2		1000293937	1242	1358	00	0001
DS*821*B46*C.2		1000293937	1270	2231	00	0002
DS*821*B46*C.2		1000293937	1298	1308	00	0003
DS*821*B46*C.2		1000346101	1094	2034	00	0004
DS*821*B46*C.2	Each use of	1000346101	1222	1959	00	0005
DS*821*B46*C.2	this item	1000387209	1174	1665	00	0006
DS*821*B46*C.2		1000387209	1203	1639	00	0007
DS*821*B46*C.2		1000444473	1324	1111	00	0008
DS*821*B46*C.2		9000000324	2018	0875	01	0009
DS*821*B46*C.3		1000362104	1127	1685	00	0001
DS*821*B46*C.3		1000369702	1097	1270	00	0002
DS*821*B46*C.3		1000419029	2048	1189	00	0003
DS*821*B46*C.3		9000000321	1148	0808	01	0004
DS*821*B46*C.3		9000000321	1167	1249	01	0005
DS*821*B46*C.3		9000000321	1167	1260	01	0006
DS*821*S3*1943*C.2		1000355561	2016	1406	00	0001
DS*821*S3*1943*C.2		1000360370	1226	1144	90	0002
DS*821*S3*1943*C.2		1000360371	1260	1260	00	0003
DS*821*S3*1943*C.2		1000360371	2045	1417	00	0004
DS*821*S3*1943*C.2		1000367661	1100	1173	00	0005
DS*821*S3*1943*C.2		1000395723	1320	2207	00	0006
DS*821*S3*1943*C.2		1000440610	1285	1403	90	0007
DS*849*R7H4		1000296699	2060	1305	00	0001
DS*849*R7H4		1000344237	1108	1332	00	0002
DS*849*R7H4		1000370946	1190	1561	00	0003
DS*849*R7H4		1000370946	1217	1260	00	0004
DS*849*R7H4		1000370946	1274	1197	00	0005
DS*849*R7H4		1000370946	1294	1376	00	0006
DS*849*R7H4		1000370946	1306	1157	00	0007
DS*849*R7H4		1000370946	1334	1360	00	0008
DS*849*R7H4		1000370946	1343	1109	90	0009
DS*849*R7H4		1000370946	1365	1142	00	0010
DS*849*R7H4		1000370946	2028	1821	00	0011
DS*889*M4		1000370946	1190	1560	00	0001
DS*889*M4		1000370946	1217	1261	00	0002
DS*889*M4		1000370946	1274	1197	00	0003
DS*889*M4		1000370946	1306	1155	00	0004
DS*889*M4		1000370946	1334	1361	00	0005
DS*889*M4		1000370946	1343	1111	90	0006
DS*889*M4		1000370946	1365	1146	00	0007
DS*889*M4		1000370946	2028	1819	00	0008
DS*889*M4		1000370946	2058	1130	00	0009
DS*889*S67		1000370946	1108	2400	00	0001
DS*889*S67		1000370946	1137	1192	00	0002
DS*889*S67		1000370946	1165	1196	00	0003
DS*889*S67		1000370946	1193	1498	00	0004
DS*889*S67		1000370946	1221	1340	00	0005
DS*889*S67		1000370946	1247	1096	90	0006
DS*889*S67		1000370946	1278	1815	00	0007
DS*889*S67		1000370946	1306	1158	00	0008
DS*889*S67		1000370946	1334	1360	00	0009
DS*889*S67		1000370946	1365	1137	00	0010
DS*889*S67		1000370946	1365	1140	00	0011
DS*889*S67		1000370946	2028	1820	00	0012
DS*889*S67		1000370946	2058	1128	00	0013

MATERIALS USED SEVEN OR MORE TIMES IN A PERIOD OF ONE YEAR

CLASSIFICATION NUMBER	ID NUMBER	YRDY	HOUR	TP	NUMBER
DT*553*M2G4*C.1	1000437241	1310	1253	00	0003
DT*553*M2G4*C.1	1000437241	1340	1154	00	0004
DT*553*M2G4*C.1	9000000704	1144	1697	00	0005
DT*553*M2G4*C.1	9000000704	1144	1699	00	0006
DT*553*M2G4*C.1	9000000704	1174	1733	00	0007
DT*553*M2G4*C.1	9000000704	1209	1778	00	0008
DT*61*M8*1969	1000365376	1104	0474	00	0001
DT*61*M8*1969	1000368534	1260	1277	00	0002
DT*61*M8*1969	1000368534	1305	1691	00	0003
DT*61*M8*1969	1000380779	1128	1379	00	0004
DT*61*M8*1969	4521645368	1355	1396	00	0005
DT*61*M8*1969	4524623354	2051	1464	00	0006
DT*61*M8*1969	6088247687	1154	0975	01	0007
DU*105*M25*C.3	1000320417	1323	1627	00	0001
DU*105*M25*C.3	1000385034	2039	1295	00	0002
DU*105*M25*C.3	1000408825	1286	1424	00	0003
DU*105*M25*C.3	1000416425	2063	1138	00	0004
DU*105*M25*C.3	1000434746	1229	1670	00	0005
DU*105*M25*C.3	1000434746	1259	1446	00	0006
DU*105*M25*C.3	6523541783	1120	1953	00	0007
DU*105*M25*C.3	7000000019	1198	1249	00	0008
DU*510*G58*1970*C.1	1000328651	1302	1594	00	0001
DU*510*G58*1970*C.1	1000328651	1327	1496	00	0002
DU*510*G58*1970*C.1	1000375481	1102	1825	00	0003
DU*510*G58*1970*C.1	1000375481	1131	1081	00	0004
DU*510*G58*1970*C.1	1000375481	1169	1036	00	0005
DU*510*G58*1970*C.1	1000375481	1209	2121	00	0006
DU*510*G58*1970*C.1	1000375481	1259	1045	00	0007
E*169.1*C87*C.4	1000206413	1137	2190	01	0001
E*169.1*C87*C.4	1000385465	1104	1306	00	0002
E*169.1*C87*C.4	1000412151	1342	1345	00	0003
E*169.1*C87*C.4	1000412151	2004	1406	00	0004
E*169.1*C87*C.4	1000412151	2032	2111	00	0005
E*169.1*C87*C.4	1000412151	2059	2265	00	0006
E*169.1*C87*C.4	1000422120	1247	1603	00	0007
E*169.1*M35*C.2	1000298707	1274	1503	00	0001
E*169.1*M35*C.2	1000298707	1305	1574	00	0002
E*169.1*M35*C.2	1000298707	1332	1170	00	0003
E*169.1*M35*C.2	1000298707	1348	1572	00	0004
E*169.1*M35*C.2	1000392056	1209	1345	00	0005
E*169.1*M35*C.2	1000413160	1168	1041	00	0006
E*169.1*M35*C.2	1000439015	2066	1163	00	0007
E*169.12*S53*1970	1000217235	1173	1293	00	0001
E*169.12*S53*1970	1000346486	1133	1153	00	0002
E*169.12*S53*1970	1000395339	2011	1648	00	0003
E*169.12*S53*1970	1000416978	2052	1582	00	0004
E*169.12*S53*1970	1000419007	1265	1622	00	0005
E*169.12*S53*1970	1000434077	1300	0952	00	0006
E*169.12*S53*1970	1000434077	1327	2043	00	0007
E*169.12*S53*1970	7000000119	1210	1786	00	0008
E*175.9*W5*C.1	1000149226	1106	0605	00	0001
E*175.9*W5*C.1	1000288482	1170	0994	00	0002
E*175.9*W5*C.1	1000288482	1198	1357	00	0003
E*175.9*W5*C.1	1000288482	1198	1355	00	0004
E*175.9*W5*C.1	1000297767	1259	1638	00	0005

APPENDIX IV-3

MATERIALS USED SEVEN OR MORE TIMES IN A PERIOD OF ONE YEAR

CLASSIFICATION NUMBER	ID NUMBER	YRDY	HOUR	TP	NUMBER
GV*1445*R4A3*1948A	1000440812	1290	1639	90	0003
GV*1445*R4A3*1948A	1000447577	2002	1375	00	0004
GV*1445*R4A3*1948A	1000449899	1343	2271	00	0005
GV*1445*R4A3*1948A	4522820933	1299	2005	00	0006
GV*1445*R4A3*1948A	8000001645	1229	1195	00	0007
GV*1469*G7L3*1960	1000264918	1174	0909	00	0001
GV*1469*G7L3*1960	1000340797	2015	1030	90	0002
GV*1469*G7L3*1960	1000341497	1093	1607	00	0003
GV*1469*G7L3*1960	1000341497	1121	1387	00	0004
GV*1469*G7L3*1960	1000363680	2063	1271	00	0005
GV*1469*G7L3*1960	1000384438	1308	1675	00	0006
GV*1469*G7L3*1960	1000403266	1259	1496	00	0007
GV*1601*K7*C.1	1000418762	1104	1180	00	0001
GV*1601*K7*C.1	1000446421	1242	1142	90	0002
GV*1601*K7*C.1	1000446421	1324	1567	90	0003
GV*1601*K7*C.1	1000446421	2018	1190	00	0004
GV*1601*K7*C.1	1000446421	2052	1503	00	0005
GV*1601*K7*C.1	1000447725	1270	1573	00	0006
GV*1601*K7*C.1	1000447725	1299	1098	00	0007
GV*1601*K7*C.1	8000000943	1193	2106	00	0008
GV*1601*K7*C.1	9000001094	1167	1307	00	0009
GV*342*W43*C.2	1000332640	1095	1281	00	0001
GV*342*W43*C.2	1000354932	1105	0993	00	0002
GV*342*W43*C.2	1000403815	1317	1525	00	0003
GV*342*W43*C.2	1000427053	1140	0095	00	0004
GV*342*W43*C.2	1000438338	1274	1272	00	0005
GV*342*W43*C.2	1000444728	2055	1408	00	0006
GV*342*W43*C.2	1000444794	2024	1975	91	0007
GV*423*A44*1969	1000322738	1286	1385	00	0001
GV*423*A44*1969	1000366756	1246	2083	00	0002
GV*423*A44*1969	1000395426	1138	1741	00	0003
GV*423*A44*1969	1000415553	2068	1105	90	0004
GV*423*A44*1969	1000452109	2054	1507	00	0005
GV*423*A44*1969	8000000422	1175	1752	00	0006
GV*423*A44*1969	8000000422	1208	1413	00	0007
GV*436*F55*C.1	1000370521	1347	1456	00	0001
GV*436*F55*C.1	1000384207	1100	1872	01	0002
GV*436*F55*C.1	1000386433	1339	2187	00	0003
GV*436*F55*C.1	1000444728	1170	0988	90	0004
GV*436*F55*C.1	1000451328	1248	1239	90	0005
GV*436*F55*C.1	1000451328	1279	1107	00	0006
GV*436*F55*C.1	1000451328	1308	1700	00	0007
GV*436*F55*C.1	2555580669	1336	1460	00	0008
GV*436*J6*C.2	1000384207	1100	1873	01	0001
GV*436*J6*C.2	1000397014	2017	1417	00	0002
GV*436*J6*C.2	1000444728	1281	1636	00	0003
GV*436*J6*C.2	1000444728	1318	1440	00	0004
GV*436*J6*C.2	4385267447	1362	1604	00	0005
GV*436*J6*C.2	8000000465	1182	1443	00	0006
GV*436*J6*C.2	8000000465	1204	1578	00	0007
GV*436*J6*C.2	8000000465	1228	0841	00	0008
GV*436*M37*1963	1000382772	1291	1549	00	0001
GV*436*M37*1963	1000382772	1319	0911	00	0002
GV*436*M37*1963	1000412753	1155	1657	00	0003
GV*436*M37*1963	1000412753	1184	1625	00	0004

MATERIALS USED SEVEN OR MORE TIMES IN A PERIOD OF ONE YEAR

CLASSIFICATION NUMBER	ID NUMBER	YRDY	HOUR	TP	NUMBER
HQ*1154*H58	1000403936	1271	1604	00	0006
HQ*1154*H58	1000437875	1353	1592	00	0007
HQ*1154*H58	1000442127	1308	2036	00	0008
HQ*1154*H58	4157386027	2036	1979	00	0009
HQ*1154*H58	8000000832	1224	1197	00	0010
HQ*1154*M5*C.1	1000335638	1259	1396	00	0001
HQ*1154*M5*C.1	1000362669	2017	1199	00	0002
HQ*1154*M5*C.1	1000371298	1152	1218	00	0003
HQ*1154*M5*C.1	1000386948	1314	1458	90	0004
HQ*1154*M5*C.1	1000404342	1183	1387	00	0005
HQ*1154*M5*C.1	7000000093	1230	1010	00	0006
HQ*1154*M5*C.1	9000000324	2027	0999	01	0007
HQ*1154*M5*C.4	1000261788	1289	1690	00	0001
HQ*1154*M5*C.4	1000311333	2005	1683	00	0002
HQ*1154*M5*C.4	1000336069	1259	0964	00	0003
HQ*1154*M5*C.4	1000336069	1281	1243	00	0004
HQ*1154*M5*C.4	1000354437	1168	1196	00	0005
HQ*1154*M5*C.4	1000409720	1320	2203	00	0006
HQ*1154*M5*C.4	9000000324	2034	1771	01	0007
HQ*12*D4	1000345235	1241	0946	00	0001
HQ*12*D4	1000345235	1241	0944	01	0002
HQ*12*D4	1000345235	1269	1328	00	0003
HQ*12*D4	1000345235	1297	1385	00	0004
HQ*12*D4	1000345235	1327	2203	00	0005
HQ*12*D4	1000345235	1357	0813	00	0006
HQ*12*D4	1000345235	2022	1702	00	0007
HQ*12*D4	1000385434	2057	1206	00	0008
HQ*1420*B5	1000376700	1308	1244	00	0001
HQ*1420*B5	1000376700	1336	1032	00	0002
HQ*1420*B5	1000386596	1095	1589	00	0003
HQ*1420*B5	1000390443	1217	1741	00	0004
HQ*1420*B5	1000442127	1267	1572	90	0005
HQ*1420*B5	4522408641	2027	2129	00	0006
HQ*1420*B5	6190266437	1147	1494	90	0007
HQ*1426*F68*C.1	1000257281	1299	0947	00	0001
HQ*1426*F68*C.1	1000257281	1332	1571	00	0002
HQ*1426*F68*C.1	1000376254	1109	2392	00	0003
HQ*1426*F68*C.1	1000376700	1265	1213	00	0004
HQ*1426*F68*C.1	1000386586	2030	1592	00	0005
HQ*1426*F68*C.1	1000390443	1217	1742	00	0006
HQ*1426*F68*C.1	2033222498	1362	1593	00	0007
HQ*1426*F68*C.1	7000000024	1174	1052	00	0008
HQ*1426*F68*C.2	1000376700	1305	1148	02	0001
HQ*1426*F68*C.2	1000376700	1321	1695	00	0002
HQ*1426*F68*C.2	1000382295	1107	0856	00	0003
HQ*1426*F68*C.2	1000408808	1348	1840	00	0004
HQ*1426*F68*C.2	1000442127	1267	1572	90	0005
HQ*1426*F68*C.2	8000000121	1175	0933	00	0006
HQ*1426*F68*C.2	9000000324	2041	1880	01	0007
HQ*1426*F68*C.2	9000000909	1145	1681	00	0008
HQ*1426*M85*C.1	1000261788	1239	1554	00	0001
HQ*1426*M85*C.1	1000343875	1264	1341	90	0002
HQ*1426*M85*C.1	1000344909	2004	1082	01	0003
HQ*1426*M85*C.1	1000354894	1295	1067	00	0004
HQ*1426*M85*C.1	1000367448	2052	1117	00	0005

APPENDIX V

Books Used 7 or More Times Per Year
(Excluding Renewals)

MATERIALS USED SEVEN OR MOR TIMES IN A PERIOD OF ONE YEAR (EXCLUDING RENEWALS)

CLASSIFICATION NUMBER	ID NUMBER	YRDY	HOUR	TP	NUMBER
B*3376*W563P53*1958*C.1	1000415009	1273	2177	00	0003
B*3376*W563P53*1958*C.1	1000422379	2055	1391	00	0004
B*3376*W563P53*1958*C.1	4265549585	1326	1269	00	0005
B*3376*W563P53*1958*C.1	8000000593	1180	1724	00	0006
B*3376*W563P53*1958*C.1	8000000593	1208	1624	00	0007
B*3376*W563P53*1958*C.1	9000000321	1248	1682	01	0008
B*819*B33*C.5	1000309060	1264	1161	00	0001
B*819*B33*C.5	1000365992	1298	2301	90	0002
B*819*B33*C.5	1000382885	1216	1690	00	0003
B*819*B33*C.5	1000412733	1343	1383	00	0004
B*819*B33*C.5	1000440028	1322	1421	00	0005
B*819*B33*C.5	1000446748	2033	1470	00	0006
B*819*B33*C.5	9000000074	1158	1186	00	0007
B*819*S256	1000145194	2042	1115	00	0001
B*819*S256	1000362302	1321	1392	90	0002
B*819*S256	1000366911	1224	1337	00	0003
B*819*S256	1000412733	2062	1100	00	0004
B*819*S256	1000415974	1101	1124	00	0005
B*819*S256	1000417215	1286	1056	00	0006
B*819*S256	1000442050	1261	1430	00	0007
B*819*S256	1000444945	1336	1413	00	0008
B*819*S27*1968	1000340191	1141	2049	00	0001
B*819*S27*1968	1000361956	1327	1646	00	0002
B*819*S27*1968	1000404305	1097	2181	00	0003
B*819*S27*1968	1000404510	1109	1945	00	0004
B*819*S27*1968	1000439224	1286	1313	00	0005
B*819*S27*1968	1000439519	2028	0919	00	0006
B*819*S27*1968	1000444530	1249	0970	90	0007
B*820*K6*1958	1000268591	1321	098[illegible]	90	0001
B*820*K6*1958	1000360825	1347	1344	00	0002
B*820*K6*1958	1000416843	1284	1494	00	0003
B*820*K6*1958	4238606747	1261	0985	90	0004
B*820*K6*1958	4328144875	2046	1359	00	0005
B*820*K6*1958	9000000705	1110	1193	01	0006
B*820*K6*1958	9000001104	1214	1754	00	0007
B*945*M2983E8*C.1	1000245222	1155	1301	00	0001
B*945*M2983E8*C.1	1000363448	1224	1475	90	0002
B*945*M2983E8*C.1	1000422290	2054	1483	00	0003
B*945*M2983E8*C.1	1000446388	1357	1233	00	0004
B*945*M2983E8*C.1	1000447298	1301	2315	00	0005
B*945*M2983E8*C.1	1000447298	1328	1079	00	0006
B*945*M2983E8*C.1	8000000017	1216	1821	00	0007
B*945*M2983E8*C.1	9000000047	1144	1520	01	0008
BD*450*W3*C.1	1000376161	2027	2126	00	0001
BD*450*W3*C.1	1000408042	1280	1245	00	0002
BD*450*W3*C.1	1000408673	1132	1128	00	0003
BD*450*W3*C.1	1000410233	1094	1393	00	0004
BD*450*W3*C.1	4522480075	2065	1763	00	0005
BD*450*W3*C.1	8000000882	1192	1690	00	0006
BD*450*W3*C.1	9000000189	1205	1111	00	0007
BF*121*P85*C.2	1000245222	1102	0599	00	0001
BF*121*P85*C.2	1000322255	1130	1889	00	0002
BF*121*P85*C.2	1000360825	1348	2061	00	0003
BF*121*P85*C.2	1000413003	2055	1451	00	0004
BF*121*P85*C.2	1000420132	1166	1566	00	0005

Each use of
this item.

MATERIALS USED SEVEN OR MOR TIMES IN A PERIOD CF ONE YEAR

CLASSIFICATION NUMBER	ID NUMBER	YRDY	HOUR	TP	NUMBER
D*743*E35*C.1	1000430715	1165	1320	00	0005
D*743*E35*C.1	8000000079	1217	1200	00	0006
D*743*E35*C.1	9000000739	1118	2073	00	0007
DA*142*S7	1000332189	1306	1673	00	0001
DA*142*S7	1000363278	1272	1518	90	0002
DA*142*S7	1000408635	2046	1405	00	0003
DA*142*S7	1000416170	1335	1190	00	0004
DA*142*S7	1000420590	1223	1120	00	0005
DA*142*S7	8000001236	1201	1498	00	0006
DA*142*S7	8000001677	1236	1184	00	0007
DA*911*M3*C.2	1000240937	1226	1447	00	0001
DA*911*M3*C.2	1000421918	1263	1424	00	0002
DA*911*M3*C.2	1000422963	1331	1645	00	0003
DA*911*M3*C.2	4360323212	1287	1045	00	0004
DA*911*M3*C.2	4575542183	2048	2110	00	0005
DA*911*M3*C.2	6524325047	1138	1734	01	0006
DA*911*M3*C.2	9000000043	1117	1005	01	0007
DD*247*H5A322*	1000337915	1299	2256	00	0001
DD*247*H5A322*	1000344630	1160	1205	90	0002
DD*247*H5A322*	1000360486	1322	2189	00	0003
DD*247*H5A322*	1000415310	1105	0755	00	0004
DD*247*H5A322*	1000422466	1195	2113	00	0005
DD*247*H5A322*	1000422466	1195	2113	00	0006
DD*247*H5A322*	1000431816	1264	2200	00	0007
DD*247*H5A322*	1000443278	2028	1421	00	0008
DD*247*H5A322*	8000000090	1176	1339	00	0009
DK*267*C65*1968	1000293937	1247	1789	00	0001
DK*267*C65*1968	1000317339	1348	1507	00	0002
DK*267*C65*1968	1000339606	1224	1398	90	0003
DK*267*C65*1968	1000412986	1104	0497	00	0004
DK*267*C65*1968	1000416276	2042	1750	00	0005
DK*267*C65*1968	10004229.8	1314	1390	00	0006
DK*267*C65*1968	2475489250	1270	1552	01	0007
DS*777.55*C44684*V.2	1000296699	1249	1495	00	0001
DS*777.55*C44684*V.2	1000361301	2067	2056	00	0002
DS*777.55*C44684*V.2	1000422770	1108	2882	00	0003
DS*777.55*C44684*V.2	1000442641	1328	0881	00	0004
DS*777.55*C44684*V.2	1000442641	1356	1369	00	0005
DS*777.55*C44684*V.2	2559440409	1319	1776	01	0006
DS*777.55*C44684*V.2	2570582217	1284	1400	01	0007
DS*777.55*C44684*V.2	6255563563	1126	1394	91	0008
DS*777.55*C44684*V.2	8000000159	1207	1744	00	0009
DS*778*M3C473*C.2	1000296545	1133	2252	90	0001
DS*778*M3C473*C.2	1000319656	2017	1733	00	0002
DS*778*M3C473*C.2	1000363453	1091	0935	00	0003
DS*778*M3C473*C.2	1000363453	1121	1423	00	0004
DS*778*M3C473*C.2	1000422661	1326	1167	00	0005
DS*778*M3C473*C.2	1000436986	1295	1628	00	0006
DS*778*M3C473*C.2	7000000074	1194	1682	00	0007
DS*778*M3C473*C.2	7000000105	1204	1609	00	0008
DS*778*M3S3*C.1	1000246810	2014	1511	01	0001
DS*778*M3S3*C.1	1000246810	2014	1510	00	0002
DS*778*M3S3*C.1	1000268698	1291	1674	90	0003
DS*778*M3S3*C.1	1000394299	1102	1940	00	0004
DS*778*M3S3*C.1	2559440409	1319	1776	01	0005

SUBJECT AREAS OF FUNDING DIVIDED BY COLLECTION CLASSIFICATIONS ORGANIZED BY USER ACTIVITY OF ASSIGNED MAJORS

	Library of Congress Class No.	No. of volumes charged out								
ARCHITECTURE	HQ	97	LB	90	PS	66	PR	51	E*	45
ARCHITECTURE	JK	43	HM	38	HC	38	BF	37	B*	28
ARCHITECTURE	37	27	GV	27	F*	27	PJ	23	DA	22
ARCHITECTURE	71	19	DS	19	PQ	17	70	17	57	16
ARCHITECTURE	35	16	33	16	PA	16	81	15	BR	15
ARCHITECTURE	PZ	15	NA	15	M*	15	64	15	UA	13
ARCHITECTURE	67	13	65	13	68	12	72	12	ML	12
ARCHITECTURE	92	11	G*	11	QP	11	LJ	11	DE	11
ARCHITECTURE	DU	10	79	9	PN	9	P*	9	TK	9
ARCHITECTURE	43	9	69	9	62	8	41	8	A*	8
ARCHITECTURE	BL	7	QL	7	RB	7	CB	7	34	7
ARCHITECTURE	42	7	77	6	82	6	T*	6	46	6
ARCHITECTURE	36	6	32	6	39	6	44	6	MT	6
ARCHITECTURE	DK	6	GB	6	HX	6	PD	6	PG	6
ARCHITECTURE	PT	5	H*	5	GN	5	DT	5	D*	5
ARCHITECTURE	Z*	5	78	5	94	4	76	4	74	4
ARCHITECTURE	61	4	38	4	LA	4	DC	4	HJ	4
ARCHITECTURE	HB	3	CC	3	JF	3	JC	3	QC	3
ARCHITECTURE	29	3	31	3	45	3	52	3	22	3
ARCHITECTURE	66	3	63	3	60	3	73	3	84	3
ARCHITECTURE	80	3	88	2	93	2	75	2	VK	2
ARCHITECTURE	01	2	19	2	UD	2	51	2	47	2
ARCHITECTURE	56	2	QA	2	Q*	2	ND	2	K*	2
ARCHITECTURE	SB	2	QH	2	CR	2	DD	1	GT	1
ARCHITECTURE	BM	1	QM	1	S*	1	QE	1	SD	1
ARCHITECTURE	R*	1	48	1	TX	1	TA	1	28	1
ARCHITECTURE	20	1	12	1	91	1	89	1	83	1
ARCHITECTURE	85	1		0		0		0		0
ARCHITECTURE		0		0		0		0		0
ARCHITECTURE		0		0		0		0		0
ARCHITECTURE		0		0		0		0		0
ARCHITECTURE		0		0		0		0		0
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ARCHITECTURE		0		0		0		0		0
ARCHITECTURE		0		0		0		0		0
ARCHITECTURE		0		0		0		0		0
TOTAL OF USE.S LISTED										

Decimal class (less the "0")

No. of books charged out

001396

APPENDIX VI-2

SUBJECT AREAS OF FUNDING DIVIDED BY COLLECTION CLASSIFICATIONS ORGANIZED BY USER ACTIVITY OF ASSIGNED MAJORS

CLASSICS	PA	283	PR	49	DE	46	B*	39	ML	33
CLASSICS	88	32	87	30	PG	18	68	17	PQ	14
CLASSICS	BR	14	M*	14	CC	12	61	12	64	11
CLASSICS	N*	10	63	9	18	8	69	8	HQ	8
CLASSICS	LB	6	BL	7	E*	7	NA	7	66	7
CLASSICS	33	7	79	6	29	6	46	6	65	6
CLASSICS	76	6	ND	6	DA	6	D*	5	DS	5
CLASSICS	JC	5	PS	5	PN	5	PT	5	R*	5
CLASSICS	67	5	62	5	34	5	82	5	93	4
CLASSICS	80	4	54	4	35	4	77	4	P*	4
CLASSICS	T*	3	QC	3	QA	3	HM	3	DK	3
CLASSICS	71	3	36	3	45	3	57	3	48	3
CLASSICS	78	3	92	2	91	2	22	2	47	2
CLASSICS	52	2	51	2	53	2	32	2	37	2
CLASSICS	72	2	73	2	BF	2	F*	2	G*	2
CLASSICS	GN	2	PZ	1	JK	1	GT	1	HG	1
CLASSICS	RB	1	OU	1	CT	1	75	1	74	1
CLASSICS	42	1	41	1	39	1	43	1	40	1
CLASSICS	38	1	59	1	50	1	49	1	60	1
CLASSICS	56	1	01	1	81	1		0		0
CLASSICS		0		0		0		0		0
CLASSICS		0		0		0		0		0
CLASSICS		0		0		0		0		0
CLASSICS		0		0		0		0		0
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CLASSICS		0		0		0		0		0
CLASSICS		0		0		0		0		0
CLASSICS		0		0		0		0		0
TOTAL OF USE.S LISTED										

000916

SUBJECT AREAS OF FUNDING DIVIDED BY COLLECTION CLASSIFICATIONS ORGANIZED BY USER ACTIVITY OF ASSIGNED MAJORS

COMPARATIVE LITERATURE	PQ	301	PR	207	PN	108	PS	73	PT	67
COMPARATIVE LITERATURE	PA	64	M*	54	B*	54	BR	51	89	49
COMPARATIVE LITERATURE	PJ	47	84	40	BP	36	PD	24	PC	20
COMPARATIVE LITERATURE	86	16	18	16	68	16	PG	16	P*	14
COMPARATIVE LITERATURE	BF	13	74	12	51	11	LB	11	87	11
COMPARATIVE LITERATURE	83	11	81	10	LA	9	54	9	56	9
COMPARATIVE LITERATURE	79	8	50	8	D*	8	CB	7	61	7
COMPARATIVE LITERATURE	62	6	43	6	85	6	78	5	80	5
COMPARATIVE LITERATURE	GN	5	71	5	67	5	76	5	65	5
COMPARATIVE LITERATURE	72	5	44	5	37	5	35	5	17	4
COMPARATIVE LITERATURE	40	4	41	4	53	4	52	4	69	4
COMPARATIVE LITERATURE	73	4	64	4	77	4	70	4	75	4
COMPARATIVE LITERATURE	N*	4	JK	4	BL	4	DA	4	E*	4
COMPARATIVE LITERATURE	88	3	82	3	DS	3	DD	3	63	3
COMPARATIVE LITERATURE	66	3	47	3	57	3	60	3	48	3
COMPARATIVE LITERATURE	55	3	38	3	34	3	46	3	33	3
COMPARATIVE LITERATURE	29	2	31	2	36	2	45	2	A*	2
COMPARATIVE LITERATURE	F*	2	DK	2	DE	2	HQ	2	HM	2
COMPARATIVE LITERATURE	ML	1	NA	1	PB	1	LJ	1	JC	1
COMPARATIVE LITERATURE	DC	1	AI	1	92	1	91	1	97	1
COMPARATIVE LITERATURE	49	1	59	1	42	1	26	1	19	1
COMPARATIVE LITERATURE	Z*	1	11	1	14	1	05	1		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
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COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0
COMPARATIVE LITERATURE		0		0		0		0		0

TOTAL OF USERS LISTED
001638

APPENDIX VI-4

SUBJECT AREAS OF FUNDING DIVIDED BY COLLECTION CLASSIFICATIONS ORGANIZED BY USER ACTIVITY OF ASSIGNED MAJORS

ECONOMICS	HC	156	PS	58	PR	44	HB	36	HJ	27
ECONOMICS	JK	25	HM	24	HQ	19	33	16	E*	14
ECONOMICS	F*	14	B*	13	DA	13	38	12	49	12
ECONOMICS	HX	12	H*	11	50	11	75	10	DS	10
ECONOMICS	PN	9	JC	9	77	9	81	8	76	8
ECONOMICS	HG	8	K*	8	BF	8	LB	8	D*	8
ECONOMICS	PQ	7	63	7	35	7	64	7	79	6
ECONOMICS	70	6	68	6	47	6	DE	6	ND	5
ECONOMICS	BR	5	34	5	39	5	37	5	45	5
ECONOMICS	32	5	78	4	BL	4	ML	4	SB	4
ECONOMICS	S*	3	T*	3	LJ	3	N*	3	31	3
ECONOMICS	46	3	44	3	65	3	72	3	66	3
ECONOMICS	69	3	67	3	48	3	82	3	83	2
ECONOMICS	UA	2	60	2	73	2	71	2	GV	2
ECONOMICS	JA	2	PZ	2	PA	2	LA	2	NA	2
ECONOMICS	DK	2	DT	2	DC	1	CB	1	PD	1
ECONOMICS	PC	1	P*	1	QC	1	PT	1	PG	1
ECONOMICS	PJ	1	R*	1	TA	1	QP	1	74	1
ECONOMICS	54	1	53	1	59	1	TK	1	36	1
ECONOMICS	42	1	19	1	92	1	86	1	80	1
ECONOMICS	20	1	91	1		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
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ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
ECONOMICS		0		0		0		0		0
TOTAL OF USE..S LISTED										

000822

SUBJECT AREAS OF FUNDING DIVIDED BY COLLECTION CLASSIFICATIONS ORGANIZED BY USER ACTIVITY OF ASSIGNED MAJORS

EDUCATION	LB	2288	JK	1368	PR	693	HC	660	HB	590
EDUCATION	PS	517	LJ	496	HQ	334	E*	327	LA	291
EDUCATION	81	247	HG	232	BF	176	PN	156	HM	156
EDUCATION	F*	145	PD	139	GV	136	DS	135	PQ	109
EDUCATION	QA	105	37	103	B*	100	P*	99	Z*	94
EDUCATION	DT	86	BR	86	57	86	80	86	82	84
EDUCATION	76	84	79	81	72	81	BL	78	74	74
EDUCATION	33	72	70	71	PA	68	39	67	L*	65
EDUCATION	H*	65	35	64	PT	62	41	62	64	62
EDUCATION	65	61	63	60	32	60	44	60	HJ	59
EDUCATION	68	54	34	54	T*	52	36	52	31	50
EDUCATION	73	50	38	49	42	49	62	49	71	49
EDUCATION	D*	48	77	48	75	46	59	41	DE	41
EDUCATION	HX	40	DK	40	66	39	43	39	55	39
EDUCATION	PJ	38	61	38	46	38	67	37	69	37
EDUCATION	M*	37	Q*	35	45	35	56	34	GN	33
EDUCATION	54	33	60	30	JC	29	DA	29	PZ	28
EDUCATION	PG	28	ML	28	RB	24	29	23	51	23
EDUCATION	92	23	DU	22	N*	22	97	21	53	21
EDUCATION	49	20	52	19	MT	18	G*	18	91	17
EDUCATION	94	17	78	17	UA	17	50	16	47	16
EDUCATION	BM	15	QH	14	QC	12	JA	12	DC	12
EDUCATION	TX	11	GT	11	SB	11	K*	10	CB	10
EDUCATION	AI	9	QD	9	93	8	QL	8	JF	7
EDUCATION	DD	7	ND	7	PC	7	TA	7	QB	7
EDUCATION	40	7	48	7	30	7	17	7	88	7
EDUCATION	84	7	83	6	19	6	QE	6	S*	5
EDUCATION	22	5	85	5	89	4	28	4	NA	4
EDUCATION	A*	3	R*	3	23	3	U*	3	TK	3
EDUCATION	95	3	86	2	02	2	11	2	VK	2
EDUCATION	GB	2	CT	2	QP	2	KK	2	CC	2
EDUCATION	PB	1	QK	1	BP	1	QM	1	SD	1
EDUCATION	26	1	18	1	20	1	TP	1	VA	1
EDUCATION	07	1	01	1		0		0		0
EDUCATION		0		0		0		0		0
EDUCATION		0		0		0		0		0
EDUCATION		0		0		0		0		0
EDUCATION		0		0		0		0		0
EDUCATION		0		0		0		0		0
EDUCATION		0		0		0		0		0
EDUCATION		0		0		0		0		0

TOTAL OF USERS LISTED
013659

SUBJECT AREAS AS DEFINED BY CU MAJORS:

Computer Codes

ANTHROPOLOGY:

101 - Anthropology, A & S

403 - Anthropology, Graduate

AFRICAN AND MIDDLE EASTERN STUDIES

100 - African and Middle Eastern Studies, A & S

ARCHITECTURE

160 - Pre-Architecture, A & S

850 - Architecture, Arch.

851 - Arch. & Business, Arch.

852 - Environmental Design, Arch.

853 - Environmental Design & Business, Arch.

ASIAN STUDIES COMMITTEE

102 - Asian Studies, A & S

117 - East Asian Studies, A & S

ASTROGEOPHYSICS

464 - Astrogeophysics, Graduate

BIOLOGY

106 - Biology (With Education), A & S

103 - Botany, A & S

406 - Basic Science, Graduate

407 - Biology, Graduate

408 - Botany, Graduate

463 - Zoology, Graduate

BUSINESS

161 - Pre-Business Curriculum, A & S

201 - Accounting, Business

203 - Business Education, Bus.

205 - Finance, Bus.

207 - International Business, Bus.

209 - Management, Bus.

211 - Marketing, Bus.

215 - Office Administration, Bus.

217 - Real Estate, Bus.

219 - Statistics, Bus.

221 - Manpower Management, Bus.

222 - Production Management, Bus.

223 - Small Business Management, Bus.

224 - Transportation Management, Bus.

299 - Undetermined, Business

401 - Accounting (M.S.), Graduate

421 - Finance (M.S.), Graduate

434 - Labor Relations, Graduate

437 - Management (M.S.), Graduate

448 - Personnel Service, Graduate

465 - Health Administration, Graduate

474 - Management Science, Graduate

475 - Manpower Management, Graduate

*438 - Marketing, Graduate

CHEMISTRY

105 - Chemistry, A & S

425 - Chemical Physics, Graduate

CLASSICS

110 - Classical Languages, A & S

143 - Latin, A & S

APPENDIX VIA

SUBJECT AREAS AS DEFINED BY CU MAJORS:

Computer Codes

ANTHROPOLOGY:

101 - Anthropology, A & S

403 - Anthropology, Graduate

AFRICAN AND MIDDLE EASTERN STUDIES

100 - African and Middle Eastern Studies, A & S

ARCHITECTURE

160 - Pre-Architecture, A & S

850 - Architecture, Arch.

851 - Arch. & Business, Arch.

852 - Environmental Design, Arch.

853 - Environmental Design & Business, Arch.

ASIAN STUDIES COMMITTEE

102 - Asian Studies, A & S

117 - East Asian Studies, A & S

ASTROGEOPHYSICS

464 - Astrogeophysics, Graduate

BIOLOGY

106 - Biology (With Education), A & S

103 - Botany, A & S

406 - Basic Science, Graduate

407 - Biology, Graduate

408 - Botany, Graduate

463 - Zoology, Graduate

BUSINESS

161 - Pre-Business Curriculum, A & S

201 - Accounting, Business

203 - Business Education, Bus.

205 - Finance, Bus.

207 - International Business, Bus.

209 - Management, Bus.

211 - Marketing, Bus.

215 - Office Administration, Bus.

217 - Real Estate, Bus.

219 - Statistics, Bus.

221 - Manpower Management, Bus.

222 - Production Management, Bus.

223 - Small Business Management, Bus.

224 - Transportation Management, Bus.

299 - Undetermined, Business

401 - Accounting (M.S.), Graduate

421 - Finance (M.S.), Graduate

434 - Labor Relations, Graduate

437 - Management (M.S.), Graduate

448 - Personnel Service, Graduate

465 - Health Administration, Graduate

474 - Management Science, Graduate

475 - Manpower Management, Graduate

*438 - Marketing, Graduate

CHEMISTRY

105 - Chemistry, A & S

425 - Chemical Physics, Graduate

CLASSICS

110 - Classical Languages, A & S

143 - Latin, A & S